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Edited by

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and
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tains student reports from seminar in strategic planning course at Naval Postgraduate ool and brief introduction by faculty. Part I contains cases of planning/strategic agement at national headquarters level: The 1987 and 1988 Reports on the National Security ategy, A Planning System Case Study Analysis of Discriminate Deterrence, Competitive ategies, The Marshall Plan: A Case Study in Strategic Planning, McNamara and Program geting: Is the First "P" in "PPBS" Silent? Part II contains cases of Navy strategic nning: The Navy's General Board, United States Inter-War Planning--From Orange to Rainbow, B-36/USS United States Controversy, Navy Long-Range Planning: The Extended and Strategic w, Sea Plan 2000: Naval Force Planning Study, The Maritime Strategy: A Case Study in ategic Planning. Part III contains other cases. Appendices contain course outlines. A panion report "Strategic Management for Defense Department," NPS-56-88-030, should be sulted for a review of project status to date. Comments by readers are invited.
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INTRODUCTION

The attached student reports are an interim deliverable for our project "Strategic Management for the Defense Department" sponsored by the Director, Net Assessment, in the Office of the Secretary of Defense (OSD), and co-sponsored by the OSD Competitive Strategies Office and Strategic Planning Branch and the National Security Council Staff. A companion technical report, "Strategic Management for the Defense Department," NPS-56-88-031, September 1988, details the project's genesis, efforts during the first year, and results to date. No attempt is made to duplicate that information in this volume.

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The reports contained herein were prepared by strategic planning curricula students enrolled in the National Security Affairs (NSA) Department capstone Seminar in Strategic Planning, taught during the Spring Quarter, Academic Year 1988. A course description is attached as Appendix A. This seminar, NS 4230, was the first opportunity to introduce strategic management concepts to students enrolled in the NSA strategic planning curricula.

The reports herein will be recycled to students that take NS 4230 during Academic Year 1989. They will also be used in the capstone strategic management course in the Administrative Sciences Department, Strategic Management: Public and Private. This course, MN 4105, was revised substantially to introduce public sector material - much of it taken from the reports

developed by the NSA students. The course outline for MN 4105 is attached as Appendix B.

NSA and Administrative Sciences faculty at the Naval Postgraduate School who teach these two courses will continue to develop and refine the attached reports into more formal case studies for classroom use in addition to generating new reports and cases for subsequent class offerings. Initial copies of the student reports were delivered to the sponsors at a meeting held in Monterey on 19 - 20 July 1988. Comments from the sponsors and other readers of this report should be directed to the investigators:

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Part I of the attached reports contains examples of strategic planning and management done at the Washington headquarters level. The first of these is an example of strategic planning which results from a Congressional mandate, and performed by line organizations within the executive branch of government. The two White House reports, National Security Strategy of the United States, represent planning in the abstract - a plan not tied at all to any execution effort.

The second report is an example of a Blue-Ribbon panel commissioned jointly by the Secretary of Defense and the Assistant to the President for National Security Affairs. As the previously mentioned White House reports, Discriminate Deterrence is the result of planning done without regard to execution of that plan under a strategic management scheme. The third report is the result of original research done by a student on the introduction of competitive strategies (a business concept) into the Defense Department. Since this is an on-going effort, complete findings are premature.

The final two cases presented in Part I are examples of strategic management at the national level. In the case of the Marshall Plan, multiple agencies in Washington were able to agree on an international plan of action and successfully execute that plan. In the case of the Planning, Programming, and Budgeting System (PPBS), introduced into the Department of Defense during the tenure of Secretary Robert S. McNamara, the plan for PPBS was developed and executed, with mixed results. Like many reform efforts, PPBS was an attempt to introduce rationality into what is otherwise political decision-making.

Part II contains individual reports that are examples of Navy strategic planning and one case of joint service planning with emphasis on the Navy and a maritime theater of military operations. The focus on the Navy, despite the lack of official sponsorship of this project by the Navy, is logical since the student body of the NSA classes is entirely made up of active duty naval officers who are enrolled in the strategic

planning curricula. Perhaps as a result of reading this and the companion technical report, additional Navy interest will be generated.

The first case in Part II involves a historical example of strategic planning done by the Navy prior to World War I. Inter-War strategic planning and in particular, war planning, is examined in the second case study. In both cases, the relationship of pre-war planning to execution of plans during a war is of interest to the reader.

The third report in Part II deals with attempts to implement strategic plans by two services that were in disagreement over basic roles and missions. The post-War B-36/USS United States controversy is well known within the defense community as an example of interservice rivalry at its most damaging.

The final three reports in Part II deal with more recent attempts at long-range strategic planning within the Navy. The first is an overview of general efforts within the Office of the Chief of Naval Operations. The second is a examination of a special ad hoc planning effort conducted by the Navy that made use of the expertise at the Naval War College. The author of this report also prepared his thesis as a part of our research project. Sponsors were provided copies of "A Theory of Naval Strategic Planning," by LT John R. Hafey, June 1988, during their meeting in Monterey. An additional seventy-five copies were sent to military planning staff offices, libraries, and selected

defense contractors. Other interested parties may obtain a copy of this thesis from the Defense Technical Information Center.

The final report in Part II is a look at the creation of The Maritime Strategy under the Reagan administration. The Maritime Strategy is an example of strategic planning and strategic management conducted by a staff organization itself. The results of this section are, in part, a result of participation by faculty and students in the "Maritime Strategy in the Pacific Conference" held at the NPS during August 1987. At that conference were many of the individuals who were responsible for the writing of The Maritime Strategy and others who worked on earlier and similar concepts of operations. The conference was sponsored by the Deputy Under Secretary of the Navy (Policy).

Part III contains additional strategic planning cases that Navy strategic planning students would have not normally been exposed to prior to this research project. The first of these involves Air Force efforts in long range planning. The Air Force method of planning is in sharp contrast to that of the Navy. The final NS 4230 seminar session includeded a retired Army general officer whose focus was on the differences in substance and style in service strategic planning efforts. The final session also addressed the question "should naval officers be strategists?"

The next two reports concern multi-agency efforts to manage the national defense stockpile and strategic petroleum reserve. Both endeavors involve strategic analysis, planning, and actual execution of plans. These two plans involve international

economic and politico-military affairs and both thoroughly involve the legislative and executive branches of the government.

The final two student reports involve strategic planning by non-defense organizations. The report on the National Aeronautics and Space Administration (NASA) finds that good management can overcome poor planning. The second, the case of the Supersonic Transport involves reasonably good planning but a failure to execute the plan.

Each of the student papers is supposed to have a background of the international or national context at the time, a brief description of the strategic planning/management system itself, key assumptions made by personnel involved in the process, and an analysis of the key elements that resulted in success or failure of the plan or the execution of that plan.

Some of these student reports will eventually be developed into formal case studies and included in our final technical report at the end of the three years research effort. The researchers wish to acknowledge the contribution of the students to our project and express their appreciation for the research, analysis, and writing that they performed.

THE 1987 AND 1988 REPORTS ON THE NATIONAL SECURITY STRATEGY

LT F.F. Randolph

I. INTRODUCTION

Section 603 of the Goldwater-Nichols Act of 1986 (Public Law 99-443) requires the President to transmit to Congress each year a comprehensive report on the U.S. national security strategy. Accordingly, the Reagan Administration has submitted two such reports: 1987 and 1988. It is difficult to define the exact importance of these documents. They are called "national security strategy reports," but under our system of government the President does not have the final say in setting U.S. strategy. On the other hand, while the reports cannot speak for the nation, the President's view of national strategy is very important--he or she is the nation's chief executive and the commander-in-chief of the nation's military.

Another factor which confuses the importance of the documents is that they are issued at what appears to be a time of strategic transition. The 1987 report states that the postwar era ended in the 1970's. In the 1970's, the U.S. lost its position of global preeminence which it held at the onset of the postwar era. However, neither the 1987 nor the 1988 report enumerate the characteristics of the new

era except for the loss of U.S. preeminence. Furthermore, both reports claim that the present U.S. strategy is that which was adopted at the beginning of the postwar era. This claim creates a confusion: how can the U.S. maintain the same strategy if the world environment has fundamentally changed?

This paper analyzes the 1987 and 1988 national security strategy reports as examples of strategic management. After a review of the nature of the system of management and of the key assumptions and constraints of the reports, a discussion will be provided of the key elements of the present U.S. strategy as outlined in the 1987 and 1988 reports.

II. SYSTEM OF STRATEGIC MANAGEMENT

Under the U.S. system of government, the ultimate responsibility for national security rests upon the American people themselves. The U.S. government is merely the creation of the American people, instituted to secure their unalienable rights to life, liberty, and the pursuit of happiness. The U.S. Constitution thus embodies the form of government which the American people have chosen to secure their rights.

Under the U.S. Constitution, the government's responsibility for national security is divided between the President and Congress. The President is the chief executive and

the commander-in-chief of the U.S. military. He or she has the power--by and with the consent of the Senate--to make treaties and to appoint ambassadors and other public officers. (Article II) Balanced against this power of the President, the Congress has the power to lay and collect taxes, provide for the common defense, to regulate commerce with foreign nations, to define and punish offenses against the Law of Nations, to declare war, to raise and support armies, to provide and maintain a Navy, to make rules for the government and regulation of the land and naval forces, and to make all laws which are necessary and proper for carrying into execution the powers vested in the federal government by the Constitution. (Article I) Under this system, the President and Congress must cooperate in order to formulate and to implement U.S. national security strategy.

The 1987 and 1988 National Security Strategy Reports recognize this system of strategic management. The 1987 report states that

> The continued development and successful implementation of U.S. National Security Strategy is a major responsibility of the Executive Branch. But the Administration cannot accomplish this alone. Developing and supporting a National Security Strategy for the United States that provides a sound vision for the future and a realistic guide to action must be a cooperative endeavor of the Congress and the Administration. (1987 report, p. 40)

The 1988 report reiterates this view (1988 report, p. 40).

The Constitution requires the President "from time to time give the Congress information of the State of the

Union, and recommend to their consideration such measures as he shall judge necessary and expedient." (Article II) However, more than anything else, it is the federal budget which forces the President and Congress to work together. Without money, the President can achieve very little. To obtain money, he or she must convince Congress to raise the money and to allocate it to the desired programs. The Goldwater-Nichols Act recognizes this reality and specifically requires the President to submit the national security strategy report on the same date which the proposed budget is submitted. Presumably, the report is intended to be an explanation for the national security aspects of the budget.

III. ASSUMPTIONS AND CONSTRAINTS

A. KEY ASSUMPTIONS IN THE REPORTS

On the cover page of the 1987 national security report, President Reagan is quoted as saying "Freedom, peace and prosperity...that's what America is all about...for ourselves, our friends, and those people across the globe struggling for democracy." This concept of America's mission in the world is the unifying theme of both the 1987 and 1988 reports.

The reports elaborate on the meaning of the concepts of freedom, peace and prosperity. Freedom is the ultimate value, because it seems to be the best means of achieving everything else which is good. The 1987 report confidently

asserts that "if we are to achieve the kind of world we all hope to see, democracy must continue to prosper and expand." (1987 report, p. 9) Peace is the result of a stable equilibrium of international forces. To achieve peace, we must ensure that hostile states or groups of states are deterred from seeking to dominate the Eurasian land mass (1988 report, p. 1) and that no power dares to initiate a nuclear war (1987 report, p. 22; 1988 report, p. 15). Thus, peace requires strong U.S. conventional and nuclear forces. Finally, prosperity is the result of a commitment to capitalism and free trade. The 1987 national security strategy report explains that "we believe that market-oriented policies are key to greater growth in America and throughout the world." (1987 report, p. 12)

The 1988 report states that freedom, peace and prosperity are at the heart of the U.S. strategy and that this strategy has been the basic Y.S. approach to world affairs ever since the Second World War. This continuity reflects "the fact that the strategy is grounded in unchanging geographic considerations, and designed to preserve the fundamental values of our democracy." (1988 report, p. 2) The report refutes the "commonplace criticism that U.S. National Security Strategy changes erratically every four to eight years as a result of a new Administration taking office." (1988 report, p. 1)

B. CONSTRAINTS ON THE MANAGEMENT SYSTEM

The biggest constraint on the U.S. management system for national security is the continual need to seek consent from those being governed--a constraint which the Founding Fathers believed to be the essence of just governmental power. The President, despite his position as the chief executive, must seek consent from a wide range of groups in order to implement national security strategy. The 1988 report concludes

> The Administration and Congress must both work harder to build a bipartisan public consensus on our National Security Strategy and the resources needed to execute it....Renewed consensus will be forged on the anvil of public debate--among responsible officials in government, between the Congress and the Executive, in consultation with our allies and friends, and among the larger community of interested and concerned American citizens. (1988 report, p. 41)

The cost of seeking such a consensus is a major reduction in the President's freedom of action in world affairs; however, this cost has been consciously accepted by the American people as the price of ensuring government by the consent of the governed.

IV. ANALYSIS OF KEY ELEMENTS

According to the 1987 and 1988 reports, the key elements of the U.S. national security strategy are: (1) the spread of democracy, (2) the containment of Soviet influence, (3) the avoidance of nuclear war, and (4) the spread of free market policies. While there has been significant national

debate over the implementation of these goals, it does seem fair to say that these goals have been the essence of U.S. strategy since the Second World War. Measured over this period of time, the strategy has been a success. However, international affairs pose a very long term global struggle--perhaps an eternal one. Over time, the world changes, therefore aspects of U.S. strategy must change to reflect the new conditions. While the present strategy's commitment to democracy and the avoidance of nuclear war will probably prove to be an enduring aspect of U.S. strategy, other aspects may have to change to accommodate changing world conditions.

A. THE SPREAD OF DEMOCRACY

The heart of the U.S. national security strategy is its commitment to "the promotion of our democratic way of life." (1987 report, p. 9) The 1987 report states that

> History has shown us repeatedly that only in democracies is there inherent respect for individual liberties and rights. In the postwar world, democracies have also exhibited extraordinary economic vitality. (1987 report, p. 9)

The role for the U.S. in the spread of democracy is to be a "beacon for democracy" and to provide active support to democratic forces. However, the report acknowledges limits to what the U.S. can achieve.

> Change must come from within, following a path dictated by national and local traditions. In some instances, assistance and guidance is better provided by other democracies or multilaterally. Patience and respect for

> different cultures and recognition of our own limitations must guide our effort. (1987 report, p. 9)

Examples of successful promotion of democracy are U.S. assistance to postwar Western Europe and Asia and, more recently, Western European assistance to democratic movements in Spain and Portugal.

It should not be a surprise that a commitment to democracy is a basic thrust of U.S. national security strategy--it is also a basic thrust of U.S. culture and government. Furthermore, the individuals who formulate U.S. strategy, the President and Congressmen, achieved their positions through the democratic process. At times other U.S. values may conflict with its commitment to democracy, but it is impossible to imagine a U.S. national security strategy which lacks such a fundamental commitment.

The difficulty in spreading democracy, which the 1987 and 1988 reports recognize, is that democracy can not thrive unless it exists in a supportive culture. Not all existing cultures are supportive of democracy; and even if these cultures evolve into being more supportive, such cultural evolution is a slow and difficult process. The 1987 report's admonition for "patience, respect for different cultures and recognition of our own limitations" is critical for the success of the U.S. strategy. Given the U.S. culture's deep commitment to democracy, the necessary political commitment for such a long term goal probably exists. The difficult part of the strategy will always be

the need both for patience and for a sense of our own limitations.

B. THE CONTAINMENT OF SOVIET INFLUENCE

Both the 1987 and 1988 reports agree that "the most significant threat to U.S. security interests remains the global challenge posed by the Soviet Union." (1987 report, p. 6) The only basis for U.S.-Soviet cooperation is "the common goal of avoiding direct confrontation and reducing the threat of nuclear war." (1987 report, p. 6)

The problem with the goal of containment is the ambiguity in the nature of the U.S.-Soviet competition. In the late 1940's, when the containment of the Soviets became a national goal, George Kennan defined the problem of containment as blunting the expansionistic impulse of a radical regime until its radical nature was moderated by the passage of time. Presumably, once this cooling had taken effect, the U.S.-Soviet competition could be handled on a more normal diplomatic basis. Arguably, this cooling has already occurred--certainly, the Soviet Union under Gorbachev in 1988 is significantly less radical than it was under Stalin in 1948. If so, then the 1987 and 1988 national security strategy reports are at least partially obsolete. By focusing too much on the Soviet Union and too little on the rest of the world, they fail to develop a more comprehensive strategic framework which is now needed.

However, this concept of the nature of the U.S.-Soviet competition is not the only one. John Foster Dulles tended to see the struggle between the U.S. and the Soviets as a clash between good and evil. Accordingly, the struggle is intense and will not end until one side is totally vanquished. This interpretation of the containment strategy appears to be that of the 1987 and 1988 reports. If this view is correct, then the reports' emphasis on Soviet containment provides a good blueprint for renewing and continuing the U.S. leadership of the Free World.

Determining the nature of the U.S.-Soviet competition is difficult. As stated by the 1987 report, "only a handful of people in the Politburo can claim with any confidence to know the Kremlin's precise near-term, tactical plans...." (1987 report, p. 6) Nonetheless, the 1987 report was confident that Soviet history clearly demonstrated the Soviet's long-term strategic goal: Soviet global hegemony. But doubt crept into the 1988 report. The report seemed torn between characterizing recent Soviet reforms as a campaign of disinformation and characterizing them as "hopes for fundamental changes in Soviet behavior." (1988 report, p. 5) The 1988 report concluded with a wait-and-see attitude.

Interestingly, the 1987 report, while emphasizing the continuity of U.S. strategy since the Second World War, observed that "the postwar era came to an end during the

1970's." (1987 report, p. 3) The report noted both that a policy of Soviet containment was the essence of our postwar strategy and that containment was an expensive policy. Given the economic reality of the postwar era--i.e., U.S. economic dominance--we could afford such a policy. However, in the new era, "the United States no longer has an overwhelming economic position vis-a-vis Western Europe and the East Asia rimland." (1987 report, p. 3) Combining these 1987 economic observations with the 1988 observations about the changing nature of the Soviets, the U.S. may very well be leaving the era of containment. If so, what will be our new strategic framework? Strategically and diplomatically, the U.S. is probably now in an era of fundamental transition.

C. THE AVOIDANCE OF NUCLEAR WAR

The policy of containment has always included a concept of military deterrence. The 1988 national security strategy report states that in order to deter the Soviet Union, "we must make clear to its leaders that we have the means and the will to respond effectively to coercion or aggression against our security interests." (1988 report, p. 13) The 1988 report describes the U.S. strategic nuclear forces and the supporting nuclear doctrine as the "essential foundation" of deterrence. (1988 report, p. 14) The U.S. nuclear doctrine is that we deter by maintaining a response

flexiblity and by targeting Soviet assets which are essential to their war-making capability.

However, the nuclear age has posed a severe dilemma to the American people, a dilemma which we have not yet comfortably solved. Because we believe that Soviet expansion threatens that which we value, we have been committed in deterring that expansion. In the nuclear age, that deterrence has required massive U.S. strategic nuclear forces. But now, given the size of the U.S. and Soviet nuclear arsenals, we fear that if a nuclear war erupts, nothing that we value will survive. Thus, we build nuclear weapons to protect that we value, but the weapons seem to generate as much risk as they do security.

The 1987 and 1988 reports are sensitive to this dilemma. In both reports, President Reagan unequivocably states, "I have repeatedly emphasized that a nuclear war cannot be won and must never be fought." (1987 report, p. 22; 1988 report, p. 15) The reports view the basic problem to be how to deter the Soviets while reducing the risk of nuclear war. The solution proposed by both reports is to maintain the strength of our conventional and nuclear forces, maintain our allied structure, develop strategic defenses and seek equitable and effective arms reductions which do not compromise our alliance obligations.

If we are entering a post-containment era, certainly the problem of avoiding a nuclear war will remain. An

interesting issue is how will the new era affect the problem of avoiding nuclear war? If Western Europe and Japan accept the principle that they must be more self-sufficient militarily, how can they do this--to their own satisfaction --without developing significant nuclear arsenals? If they develop these arsenals, the U.S. may no longer be able to define the nuclear threat as only coming from the Soviet Union. If the future holds a proliferation of nuclear superpowers, arms negotiations may expand from being bilateral in nature to being multilateral in nature. Furthermore, if the nuclear threat to the U.S. increases due to an increase in the number of nuclear-armed rivals, strategic defenses may become even more critical than they are now to the U.S. welfare.

D. THE SPREAD OF FREE MARKET POLICIES

The 1987 and 1988 reports assert that U.S. national power rests on the strength of our domestic economy (1988 report, p. 11; 1987 report, p. 11) and that U.S. prosperity is dependent on the cooperation of Western Europe and Japan (1988 report, p. 11; 1987 report, p. 12). Thus, the major economic goal of the U.S. national security strategy is to promote market-oriented policies through close consultation and negotiation with our allies. In addition, the U.S. recognizes a need for the developed nations to assist the developing nations to "realize sustained, non-inflationary

growth" and to help them resolve their debt problems. (1988 report, p. 12)

The main obstacle to such international economic cooperation is domestic political pressure. The 1988 report acknowledges that "the challenge to the United States now is to avoid letting tensions and disputes over trade issues undermine domestic support for free trade...." (1988 report, p. 12) This same potential pressure exists within each of our allies as well.

The problem with a global free trade policy is that there is no effective enforcement mechanism. The only enforcement mechanism now is the threat by each nation to retaliate, with trade barriers, against violators. This threat of retaliation probably works in times of global prosperity; but the mechanism may fail in times of hardship when it is most needed. Such a failure was demonstrated by the trade barriers which sprang up at the onset of the depression of the 1930's.

Free trade among the industrialized nations was a predominant economic feature of the postwar era. Will it continue to be a feature of the new era? The example of OPEC in the 1970's and 1980's is illustrative of one possible course for economic cooperation among nations. In the 1970's, the OPEC nations--led by Saudi Arabia--cooperated to control the world supply of oil and its price. All the OPEC nations benefitted, but to varying degrees. By the

1980's, individual hardships and international rivalries led some nations to seek a greater share of the group benefits. The rivalries led to a break down in cooperation, and the price of oil dropped as each nation unilaterally increased its production of oil.

Was the economic cooperation among the industrialized nations during the postwar era a product of the U.S. ability to act as a leader due to its predominant military and economic power? Arguably, it was. Thus, with that predominance at an end, the foundation for the cooperation may now be a lot weaker than it was ten years ago. If so, the trend for cooperation may not be able to survive a severe setback in the global economy. On the other hand, perhaps the post-containment era will learn from the experience of the post-war era and continue to cooperate economically, but without a clear leader. Only time will tell.

V. CONCLUSION

Neither the 1987 nor the 1988 national security strategy report indicate possible new directions for U.S. strategy now that the postwar era has ended. This failure may stem from the fact that the American people themselves are not sure what the new era may look like or what the new U.S. role may be. In contemporary American political rhetoric, one can sense an awareness of change. The American people remain committed to democracy, the U.S. remains a powerful

military and economic power, the Soviets remain a powerful rival and nuclear war still poses a serious dilemma. Yet there seems to be important change underway. Maybe the Soviets are different from what they were in the late 1940's. The U.S. may no longer be able to guarantee the security of itself and its allies, without an increased contribution from its allies. If the allies increase their military strength, will the character of the alliance change? Furthermore, the U.S. probably does not have the same commitment to free-market policies that it does to democracy. Future economic challenges may bring the present U.S. economic policy into question.

Under the U.S. system of government, it is the U.S. people who decide the long-term direction of the U.S. When the world situation is itself not clear, the U.S. people will be divided as to the best strategic direction for the country. We now live in an era of transition. The postwar era has ended, and a new era has already begun. But, we the people, can not yet see the features of this new era. Accordingly, the 1987 and 1988 National security strategy reports will probably be remembered as a glimpse of U.S. strategy in the midst of fundamental flux.

A PLANNING SYSTEM CASE STUDY ANALYSIS OF Discriminate Deterrence

LT Rory Calhoun

I. BACKGROUND

The United States faces a major challenge in preparing for the security environment of the early 21st century. This environment will become increasingly multipolar as Japan and China rise to major power status. Proliferation of high technology weapon systems should be expected as well as a growing disparity in the standards of living between the leading powers and many Third World countries. The animosity created by this disparity, coupled with the availability of highly accurate, relatively inexpensive weapons, will make this an extremely dangerous world from the standpoints of terrorism, blackmail, and small-scale attack.

A more near term problem deals with maintaining our deterrent posture and then containment of Soviet expansion. In spite of public announcements, the Soviets are continuing an unprecedented military buildup in conventional as well as nuclear forces. They are also feverishly pursuing military applications for advanced technologies. Although direct U.S.-Soviet military interaction is improbable, there exists a distinct likelihood that the need will arise to put down Soviet sponsored insurrections in remote locations

throughout the world. In a crisis, lack of a credible deterrent against the Soviets could prove disastrous.

Faced with the responsibility of organizing America's resources to ensure her continued physical security in the evolving world, President Reagan commissioned an advisory committee to investigate the policy and strategy implications of the applications of advanced technology as they relate to strategic offense, strategic defense, and the conduct of theater war (including conventional war).[1] The President's charter also charged the committee with assessing the utility of and recommending applications for advanced technology concepts relating to U.S. security interests under conditions of peace, crisis, and theater or strategic war.

The 15 month period spanning the Commission's deliberations witnessed the employment of U.S. naval forces in the Persian Gulf, continued Soviet armed intervention in Afghanistan, the October stock market crash and resultant world economic system oscillations, the launching of a Chinese ballistic missile submarine, implementation of the Reorganization and Acquisition Improvement Acts of 1986, continued Soviet claims of glasnost and perestroika, a multitude of Third World problems, and U.S. involvement in several major overseas basing disputes. Other issues which surfaced either concurrently with this period or shortly thereafter included the resignation of Casper Weinberger as

Secretary of Defense, Intermediate Nuclear Force (INF) reduction negotiations with the Soviets, the Presidential election primaries, and a major across-the-board Defense Department budget cut. All of these events had a major impact on the nation's perceived strategic direction needs.

Discriminant Deterrence, the product of the efforts of the Advisory Committee on Integrated Long-Term Strategy as reported to the President on January 12, 1988, is touted as "having alerted us to the new varieties of danger that lie ahead and having shown us that, in our present condition, we are unprepared for the changes we are about to encounter."[2] At first glance it appears that this excellent strategic work is about to be swept into oblivion even before its content is digested. It has failed to receive official Presidential endorsement and is never mentioned in the fiscal year 1989 Secretary of Defense report to Congress. However, if one looks beyond the rhetoric and focuses on the driving forces behind our national strategy, it becomes obvious that the influence of the substance of Discriminate Deterrence is diligently at work. The beliefs and recommendations set forth in the document form the basis of a "second generation" strategic document, "Competitive Strategies," which promises to provide vital strategic direction for our country.

II. THE MANAGEMENT SYSTEM

The Long-Term Integrated Strategy Advisory Committee was established on October 24, 1986 with a charter lifetime of 18 months (now amended to 24 months). It reports directly to the Secretary of Defense and the President's National Security Advisor. The bipartisan commission is co-chaired by Fred Ikle, a former Reagan Administration Undersecretary of Defense for Policy, and Albert Wohlstetter, an accomplished strategic analyst. Other members include former National Security Advisors Zbigniew Brzezinski and William Clark, former Secretary of State Henry Kissenger, Admiral James Holloway, Generals John Vessy, Bernard Schriever, and Andrew Goodpaster, Ambassador Anne Armstrong, Harvard's Professor Samuel Huntington, and Rockefeller University President Joshua Lederberg.

In preparing the Discriminate Deterrence document this distinguished group was formally supported by a research staff, an administrative staff, a public affairs counselor, and representatives acting for the President's Assistant for National Security affairs and the Chairman of the Joint Chiefs of Staff. Individual representatives from the Joint Staff, the Army, the Navy, and the Air Force were also provided. In Addition to this support, the Commission received valuable counsel from members of Congress, the President's Science Advisor, members of the National Security Council Staff, numerous professionals in the

Department of Defense and the Central Intelligence Agency, and from a broad range of specialists outside the government.[3]

Information provided by the above sources was disseminated among a set of special study groups (the research staff) for discussion and analysis. These groups were organized to investigate such things as the security environment for the next 20 years (Future Security Environment Group), the role of advanced technology in military systems (Technology Group), interactions between offensive and defensive systems on the periphery of the Soviet Union (Offense-Defense Group), the U.S. posture in regional conflicts around the world (Regional Conflict Group), and the effects of shifts in the world's population distribution (Demographic Study Group). The first four groups were chaired by Commission members while the fifth was managed by the National Defense University. The results of these deliberations were synthesized by the Commission's co-chairs to produce a coherent, unified statement of the recommended strategic directions for the nation.

Although not explicitly defined, a logical framework of analysis was followed in producing the study.[4] First, a concept of the future environment was developed through the efforts of the Future Security Environment Working Group and RAND's National Defense Research Institute.[5] Next, U.S. national goals and interests were compiled from the

Constitution, statements from the President's National Security Strategy of the United States (1987), and the personal beliefs of the Commission members--most notably Ikle, Wohlstetter, and Gorman.

This third component introduced a filter through which all information was judged. It was held that the United States faces a changing security environment. In this new environment, concentration on the apocalyptic threat will be undesirable and may be self-defeating. Also, the challenge of deterring war will remain a prime concern and can best be served by exploiting the discriminating capabilities of long-range, precision weaponry. Finally, the lessons of El Salvador impressed on the members the importance of employing the indigenous population in regional conflicts rather than U.S. combat troops.[6]

Having postulated a credible future environment and having succinctly defined the U.S. goals and interests, the Commission's next task was to define the future threats to our nation. This was accomplished by comparing the future environment with U.S. interests as well as assessing trends in the military capabilities of various countries (particularly the Soviet Union) against those of our own.

The final step entailed the stipulation of a set of principles and recommendations that could be used to revise the current U.S. "grand strategy" to bring it into line with

contemporary realities.[7] These were presented as the Commission's main points in its January report.

III. KEY PLAN ELEMENTS

A. ASSUMPTIONS

Several key assumptions were made in formulating the Commission's report. The first assumption, inherent in statements expounding methods to avoid war with the Soviet Union, maintains that the Soviets are deterred by a credible fighting force. It is also assumed that superpower conflicts can be limited. The following statement contained in the report's section covering the extreme threats provides illustration: "To deter the more plausible Soviet attacks, we must be able to respond discriminately, but must also have some prospects of keeping any such war within bounds--of ensuring that it does not rapidly deteriorate into an apocalypse."[8] The Commission is extremely critical of the strategic doctrine of "mutual deterrence" and maintains that we should never rely on stability through mutual vulnerability for our security.

A second assumption deals with establishing a credible measurement of military capability. The Commission has assumed that total annual military expenditures and annual outlays for capital stock provide adequate measures of military strength. To develop values for these estimates, the following procedure was used: 1) a roughly consistent

set of "backward-looking" and "forward-looking" estimates was produced for each by employing an aggregate production function expressing the unknown as a function of inputs of capital, labor, and technological change, and the output in 1980 value rubles; 2) key model parameters were based on historical evidence and recent experience, then modified to conform to explicit judgments concerning the course of future (in the next two decades) developments; 3) ruble-to-dollar conversion was accomplished using CIA ruble value estimates and conversion rates; and finally, 4) output values in 1980 dollars were converted to 1986 dollars using the U.S. GNP price deflator.[9] Other measures of military strength are acknowledged such as order-of-battle data, readiness and training levels, the state of moral and leadership, among others. The previous methods were chosen for their descriptive utility and ease of documentation.

Although based on empirical analysis, the global economic reorganization expressed in the report assumes that trends in certain operative factors (labor and capital distributive shares, rates of change in factor productivity, savings-investment rates from annual income, base year capital stock estimates, depreciation rates on capital stock, and demographically-consistent labor supply estimates[10]) will follow their predicted directions. Great care was taken to be thorough in the formulation of these trends so only minor fluctuations should be expected.

The report emphasizes the continuing need for strong NATO forces to deter aggression by those of the Warsaw Pact thereby disclosing another major assumption: that the NATO and Warsaw Pact Alliances will continue as viable entities throughout this period of change. However, several Commission members warn that discriminate deterrence (or the discriminate use of force) will be as necessary to ensure the existence of a united Europe in the future.[11]

B. CONSTRAINTS

Few actual constraints were levied against the planning system. The Commission received enormous cooperation from all the resources it called upon. Funding for the project included an estimated $40,000 in salaries for a professional staff and secretarial support as well as $50,000 for various fees, travel, and administrative costs. Additionally, $500,000 was provided for contractor support.[12] Finally, the Commission's stature was greatly enhanced by the prominence of its members.

One limitation that has been placed on the Commission is that of time. The Commission's charter expires after a maximum life of 24 months. Even though the initial report is complete, the Commission members stand ready to assist in implementing its conclusions. Once the charter expires, this mass of talent and influence will be disbanded. Independent efforts of the various working groups are also constrained by this deadline.

The Commission's scope has also been limited. Its name reflects reality in that the Committee's sole function is to serve as an advisory body. It is constrained to operate under the provisions of Public Law 92-463, Executive Order 12024 and implementing CSA and DoD regulations for Federal Advisory committees. As a result, its findings and recommendations cannot, of their own, formulate policy or direct acquisition.

C. COMMON GOALS AND OBJECTIVES

Good planning systems provide a focal point for the ensuing effort. In the case of the Advisory Committee on Integrated Long-Term Strategy, this guidance was provided by its charter.

> The Advisory Committee on Integrated Long-Term Strategy will serve the public interest by providing the Secretary of Defense and the President's National Security Advisor with an independent, informed assessment of the policy and strategy implications of advanced technologies for strategic defense, strategic offense and theater warfare, including conventional war.[13]

The members also shared the belief that "need demanded regeneration of certain basic concepts and ideas."[14] These included concerns about the developing security environment, the future of deterrence, and the role of technology in providing for national security. Of final note is the fact that the conclusions of the Discriminate Deterrence report are unanimously supported by the Commission's members, a remarkable attribute in light of the diversity of its personalities.

IV. ANALYSIS OF PLAN IMPLEMENTATION

An uninterrupted trail of efforts to define a comprehensive national strategy for the United States can be traced to Truman's NSC 20/4 (November 23, 1948), "U.S. Objectives with Respect to the USSR to Counter Soviet Threats to U.S. Security." Since then, no fewer than 13 such attempts have been made to codify our national strategy. Aaron Friedberg analyzed these efforts to identify patterns of success and failure as well as to develop a strategy that could be used to improve the chances for success of the efforts of the Advisory Committee on Integrated Long-Term Strategy.[15]. His results indicated that: 1) the ability of a planning effort to influence subsequent government policy declines as an administration increases in age; 2) those efforts completed shortly after inauguration fare better since the new President's strength is generally at its peak and a consensus exists as to the need for setting strategic guidelines within a new administration; 3) attempts at mid-course correction are of moderate success either because the initial danger is perceived to have disappeared or because the people who formulate the revisions lack credibility; and, 4) studies completed just prior to a major public catastrophe can capitalize on the ensuing unrest.

He suggests three strategies that can be used for increasing the probability that a planning effort will prove effective. The first calls for a broad-brush diagnosis of

the existing problems accompanied by general recommendations to treat the situation. A second approach involves identification of a specific threat combined with a specific plan to deal with it. The final method portends that a unifying theme should be developed along with an attendant set of loosely related recommendations for specific programs designed to counter a perceived threat.

Other problem areas for past plans were identified as: 1) inattention to prediction, 2) lack of a sense of urgency concerning the threat, 3) a moderation in American perceptions of the Soviet Union, 4) the inability to define a set of peacetime military goals and a "competitive strategy" for achieving them, and 5) failure to successfully incorporate arguments for strategic defense capabilities. These and other marketing tactics ("corridor work," staff meetings with influential groups and congressional leaders, open discussions with the press, and release timing are examples) were carefully pursued by the Commission members but the impact of the West European outcry over the report's implications proved too strong.

Michael Howard, Regius professor of modern history at Oxford University, Karl Kaiser, director of the Research Institute of the German Society for Foreign Affairs, and Francois de Rose, a former French representative to NATO, provided a lucid enunciation of the European concerns over Discriminate Deterrence in an article for the International

Herald Tribune. The first concern involves the report's passages on the future of nuclear deterrence in Europe. Although they acknowledge the need for modern, discriminate, nuclear weapons, the group contends that failure to link the use of these weapons directly to escalation into a wider, more devastating war (other than one in which nuclear weapons are employed only to deny success to invading Soviet forces) undermines the most important basis of alliance: the community of risk.[16]. Their real concern is that Europe may become a limited nuclear battle zone.

A similar concern revolves around the report's proposal to develop conventional forces that are capable of stopping a Soviet invasion of Western Europe dead in its tracks without resort to nuclear weapons.

> The notion of a grand conventional conflict to defeat Soviet forces has no support in Europe, primarily because the means do not exist but also because it would be likely to produce the kind of annihilation of Europe that Americans fear from nuclear escalation.[17]

A third concern centers on the report's proposal that NATO ground forces be prepared to mount deep-strike attacks across the NATO-Warsaw Pact border. Development of such a posture would be "both economically and politically unacceptable in Europe."[18] It is also feared that such a posture would be perceived as an offensive force build-up that would endanger East-West relations.

The final European concern is that the report neglects Europe's role as an actor in future world politics. They

accuse the report's authors of treating Western Europe "only as an object and not as an actor in politics--not even considered worth mentioning as a force influencing the strategic environment 20 years hence."[19]

Only one other public critique has emerged that could possibly have an influence on the fate of the report. The short fall identified claims that the report does not adequately deal with the nation's economic situation and can therefore be of only limited use. According to one journalist, "What's needed now is an equally serious and high-level study integrating national security strategy with the economic realities faced by the United States."[20] In fact, the Commission did consider the international economic environment and did relate costs to the programs recommended for support of our national security. The problem is that these findings were not published with the lead document. Instead, they are pending publication as the output from the Future Security Environment Working Group. Also, scope of the Commission's deliberations was limited by its mandate. Had an economic study been requested, this group could have produced an extremely good one.

As mentioned above, Discriminate Deterrence has failed to achieve public endorsement by those who commissioned it. Examination of the Committee's charter sheds some light on the fate of this report but the ominous forces of politics and international relations have obviously played a role in

its public demise. Perhaps the one shortfall not planned for, an Administration not willing to take certain painful steps for the sake of national security, has proved its undoing.

END NOTES

1. Charter of the Advisory Committee on Integrated Long-Term Strategy as filed with the Chairman of the Armed Services Committee, January 5, 1988 (pages not numbered in original).

2. John T. Correll, "Discriminate Deterrence," Air Force Magazine, March, 1988, p. 6.

3. Commission on Integrated Long-Term Strategy, Discriminate Deterrence (Washington, D.C.: U.S. Government Printing Office, 1988), Forwarding Letter.

4. Phone conversation with Dr. Darnell Whitt, Undersecretary of Defense for Policy, May 5, 1988.

5. RAND produced an unpublished document as an input to the Future Security Environment Working Group that presented and discussed trend estimates of GNP, annual military spending, and annual purchases of capital military stock for 15 countries for the period 1950-2010.

6. Phone conversation with Dr. Whitt, April 21, 1988. See also Discriminate Deterrence, pp. 33-37 for a discussion of the "extreme threat."

7. Discriminate Deterrence, p. 5.

8. Ibid., p. 37.

9. This procedure is outlined in the previously-mentioned RAND study.

10. RAND used these factors to develop their economic model for predicting the future view of the world economy.

11. Zbigniew Brzezinsi, Henry Kissenger, Fred Ikle, and Albert Wohlstetter, "Discriminate Deterrence Won't Leave Europe Dangling," International Herald Tribune, February 24, 1988 (see Opinion).

12. See the Commission's charter section G.

13. Ibid., section B.

14. Phone conversation with Dr. Whitt on April 21, 1988.

15. Aaron Friedberg's memo to the Commission on Integrated Long-Term Strategy is entitled "Analysis of Past Planning Efforts," The most recent revision available is dated July 29, 1987.

16. Michael Howard, Karl Kaiser, and Francois de Rose, "Deterrence Policy: A European Response," International Herald Tribune, February 4, 1988 (see the OPINION column).

17. Ibid.

18. Ibid.

19. Ibid.

20. Ernest Conne, "A Strategic Study Worth Another Look," Los Angeles Times, February 4, 1988, p. 14.

COMPETITIVE STRATEGIES

LT David J. Kern

In February 1986, Secretary of Defense Caspar Weinberger announced the establishment of a Competitive Strategies Initiative (CSI) within the Department of Defense (DoD).[1] Since that time both Secretary Weinberger and his successor Frank Carlucci have taken steps to institutionalize this process of strategic planning. Just what is competitive strategies and how will it influence U.S. military strategic planning?

I. BACKGROUND

> A Competitive Strategies analysis employs a chess match methodology which aligns enduring U.S. strengths against enduring Soviet weaknesses in a move-response-countermove sequence. This process seeks to exploit areas of potential high leverage gain that will ideally result in a new military capability reflecting a combination of operational concepts, systems, technologies, and organizational approaches.[2]

The idea of contrasting the strengths and weaknesses of one's military forces against those of the enemy has long

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[1]Caspar Weinberger, Annual Report to the Congress FY87 (Washington, D.C.: U.S. Government Publishing Office, 1986), p. 88.

[2]Frank Carlucci, Annual Report to the Congress FY89 (Washington, D.C.: U.S. Government Printing Office, 1988), p. 115.

been a prescription for military success. For example, the famous 19th century Japanese master swordsman, Miyamoto Musashi, urged his students to carefully study the fighting styles of other schools in order to learn how to defeat them.[3] Competitive Strategies applies this traditional military concept to the modern national security environment.

Since the end of World War II, the concept of deterrence has evolved into the primary goal of U.S. military forces. The CSI proposes to enhance deterrence by developing policies which will direct the peacetime superpower competition into safer areas.[4] This DoD initiative also recognizes that the domestic needs of the United States require the employment of efficient military acquisition policies in the face of a large Soviet military investment.[5] The CSI establishes task forces which study the force structures necessary for the efficient maintenance of deterrence in potential future conflict scenarios.

The first Competitive Strategies Task Force met in July 1987 to study the scenario of a high intensity conventional conflict between NATO and Warsaw Pact forces on the Euro-

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[3]Miyamoto Musashi, A Book of Five Rings: The Classic Guide to Strategy, translated by Victor Harris (Woodstock, NY: Overlook Press, 1974), p. 85.

[4]Annual Report FY89, p. 115.

[5]Competitive Strategies Office, A Department of Defense Competitive Strategies Primer, unpublished paper, March 15, 1988, p. 4.

pean Continent. The members of this task force proposed four areas in which NATO's superior information processing capability could be aligned against the Soviet requirement for strict time management and high tempo operations. The result of the task force was to identify technologies crucial to maintaining a competitive warfighting edge which would be necessary to deter a future Soviet attack upon NATO.[6]

It is too early to tell what the effect of this first Competitive Strategies Task Force Report will be. In the overall system of U.S. defense planning, the contribution of Competitive Strategies remains small. The CSI is an ad hoc system of planning employed by the Secretary of Defense concurrent with the standardized process of Planning, Programming, and Budgeting (PPBS). Unless the results of the Competitive Strategies Task Forces are incorporated into both U.S. war plans and the Five Year Defense Plan (FYDP), the CSI cannot succeed.

II. DESCRIPTION OF THE COMPETITIVE STRATEGIES METHODOLOGY

In establishing an explicit methodology for exploring the competitive relationships of military adversaries, the Office of the Secretary of Defense was able to draw upon the experience of U.S. corporate strategic planners. Beginning

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[6]Annual Report FY89, pp. 117-118.

in the early 70's, corporate planners began to examine methods of developing policies which would create a competitive economic advantage. In particular, Dr. Michael Porter at the Harvard School of Business began a series of lectures on Industry and Competitive Analysis.[7] In a broad sense, the CSI methodology has much in common with the corporate approach to competitive strategic analysis.

Dr. Porter describes corporate competitive strategy as the system of developing goals and policies which then shape a corporation's strategy for economic competition. His book, Competitive Strategy, is based on the proposition that these strategies for competition should be based upon an explicitly formulated analytical approach. Dr. Porter suggests a series of questions whose answers will form the basis of a competitive strategy:[8]

- What is your current strategy? The answer to this question requires both the explicit statement of current goals and policies and also a listing of the assumptions upon which the current strategy is based.

- What is happening in the environment? This question focuses on analyzing the industry in which the competition will take place, potential adversaries, and external factor relevant to the competition (government policies, environmental concerns, etc.). This analysis concludes by examining the strengths and weaknesses of all competitors in the contemporary environment.

- What should your strategy be? This question forces the corporation to examine whether the assumptions of its

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[7]Michael E. Porter, Competitive Strategy: Techniques for Analyzing Industries and Competitors (New York: Free Press, 1980), p. ix.

[8]Porter, pp. xvi-xx.

current strategy apply to the competitive environment. Several alternative strategies are developed. In the end, a strategy must be chosen.

The first Competitive Strategies Task Force employed a narrower methodology than their corporate contemporaries. The task force members developed their analysis in five phases:[9]

- Critical Soviet military tasks were identified;
- U.S. strengths were aligned against Soviet weaknesses;
- Several candidate strategies were developed;
- Potential Soviet responses were identified; and
- U.S. countermoves were developed and net result determined.

This Competitive Strategies analysis should be viewed as supplementing the systems analysis methods already being employed in PPBS. Competitive Strategies provides an adaptive framework for analyzing operational concepts while systems analysis focuses on weapon system comparisons. Competitive Strategies is able to postulate the effects of changing U.S. goals on the future competition. Systems analysis must analyze the goals established for the current budget cycle. Competitive Strategies narrows its analysis to selected competition scenarios. Systems analysis must encompass the entire plan for U.S. defense acquisition.[10]

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[9]Annual Report FY89, p. 116.

[10]Competitive Strategies Primer, p. 3.

The results of Competitive Strategies analysis is injected into the PPBS system by the Office of the Secretary of Defense. Technological systems identified by the CSI are placed on a list and tracked through the budget planning system. These lists are then transmitted to the respective Service Secretaries so that important competitive technologies are afforded a protected status.[11]

Currently, the CSI expects to expand its methodology by designing computer simulations and war games which will validate the strategic concepts developed by the Competitive Strategies Task Forces.[12] These war games will also provide an excellent forum for educating policy makers on the benefits of the Competitive Strategies approach.

III. EVALUATION OF THE COMPETITIVE STRATEGIES INITIATIVE

The stated institutional goals of the CSI are to:[13]

- Maintain credible deterrence in the face of substantially greater Soviet defense investments;
- Make past Soviet military investments obsolete, thereby reducing the military threat...and making them realize that cooperation is a more beneficial choice;
- Channel the competition into safer areas; and
- Channel the competition into areas less costly for us and more costly for them in offensive weapons.

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[11] Competitive Strategies Primer, p. 6.

[12] Competitive Strategies Primer, p. 5.

[13] Competitive Strategies Primer, pp. 2-3.

Examination of these goals reveals several assumptions implicit in the Competitive Strategies process. First and foremost, the principal adversary identified by the CSI is the Soviet Union. There is no indication that this analysis will be applied on a broader scale in order to examine alternative competitors in the national security arena.

Second, Competitive Strategies planning is focused on the national security environment 10 to 15 years in the future. The conflict scenarios developed for the future are intended to guide procurement policies in the current peacetime environment. The development and execution of competitive policies assumes the continued peaceful coexistence of the U.S. and the Soviet Union.

Third, the Competitive Strategies Task Forces, while looking to exploit any competitive advantage, will probably focus on technology as the answer. U.S. strategic planners tend to assume that technological advantage will continue to provide for U.S. national security.

Fourth, the Competitive Strategies methodology seems to assume that Soviet military procurement policies can be influenced by U.S. procurement policies in a sort of action-reaction arms race model. This is a very difficult assumtion to verify. On the surface, there appears to be supporting evidence. The U.S. development of the B-52 is often cited as an example of a successful competitive strategy. The deployment of B-52 strategic bombers

supposedly forced the Soviet Union to spend enormous resources on air defense. This argument, however, overlooks the possibility that other events may have caused Soviet concern over air defense. For instance, it may have been spurred by U.S. intelligence aircraft which systematically overflew the USSR in the late 50's. The formulation of an action-reaction superpower procurement model oversimplifies a complex decision-making process.

Even assuming that these assumptions are valid, the Competitive Strategies process is greatly constrained by the bureaucratic environment of DoD military planning. First, the CSI is confined to influencing DoD policies only. The Competitive Strategies process is not free to examine the larger score of U.S. national security policy.

Each of the individual players in the Competitive Strategies process are influenced by parochial bureaucratic interests. The strategic planning performed by Competitive Strategies Task Forces is based upon an analysis of future U.S. warfighting capability. Current war plans are developed by the Unified and Specified Commanders and approved by the Joint Chiefs of Staff. The potential for internal conflict is high if civilians in Competitive Strategies Task Forces attempt to usurp this traditionally military function.

The implementation procedures of the Competitive Strategies process promise to protect technological programs

considered vital to the future security needs of the nation. The creation of protected programs reduces the ability of the service secretaries to determine their service budgets. Friction may be created by programs lobbying the Competitive Strategies Task Forces for protection behind the backs of the service secretaries.

IV. ANALYSIS

One should not overemphasize the negative aspects of assumptions and constraints when examining the Competitive Strategies Initiative. Any strategic planning initiative developed within the DoD would be based upon assumptions, and resistance always accompanies change. The important question is, "Are the assumptions invalid or the resistance insurmountable?"

The assumptions used by the CSI are generally accepted by the U.S. defense establishment in general. Most U.S. warfighting doctrines (Maritime Strategy, Flexible Response, etc.) are based on a characterization of the Soviet Union as the enemy. Also, it is reasonable to assume that the U.S. and USSR will not soon go to war since the CSI is intended to guide peacetime procurement policies. The assumptions that U.S. technological advantage can offset Soviet numerical advantage and the modeling of an action-reaction arms race while untested, will not damage U.S. warfighting capability should they prove untrue.

There is no question that resistance to Competitive Strategies exists within DoD. For example, an unnamed Defense Department official recently noted:[14]

> ...not everyone has the same view of competitive strategies. Various people will pass judgement as to what is competitive on a priority basis and they will attempt to promote their pet rocks. They will have their own candidates they want to use to gain a greater slice of budget resources. It will confront a lot of people here who want everything without any notion of priorities. It will force them to make choices.

The results of the first Task Force seemed to support the established warfighting doctrines of the various services. The four initiatives proposed by the Task Force were:[15]

- Countering Soviet Air Operations;
- Countering Soviet Penetration of NATO Forward Defense;
- Stressing the Warsaw Pact Troop Control System; and
- Countering Soviet Global and Multitheater Operations.

These four initiatives mesh well with the already established service doctrines of Maritime Strategy, Follow on Forces Attack (FOFA), Air-Land Battle, and Air Force bomber programs such as the B-2 stealth bomber.

It is doubtful that the Competitive Strategies process would be able to influence warfighting doctrines without first gaining the support of the applicable military services. It seems, therefore, that the true role of the

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[14]Paul Mann, "Strategic Doctrine for High Technology," Aviation Week and Space Technology, June 15, 1987, p. 110.

[15]Annual Report FY89, pp. 117-118.

CSI is to integrate the accepted warfighting doctrines of the services into a comprehensive procurement strategy which will cause the Soviets to continue to spend heavily on their defensive systems.

The ability of Competitive Strategies to influence service budgets is already creating some internal friction in DoD. According to Defense News, several U.S. Navy officials are concerned that Navy programs will become neglected as Air Force and Army programs become protected by the results of the first CSI Task Force.[16] Despite resistance, the CSI is slowly consolidating its position in DoD. As a result of the first CSI Task Force, Deputy Secretary of Defense Taft is supposed to have already signed a list of military programs which will receive special protected status in future service budget requests.[17]

The potential advantages of the CSI probably outweigh any negative aspects. Focusing on the long term superpower competition provides an important supplement to the short term focus of the PPBS system. It is too early, however, to judge whether the CSI will ultimately be successful or not. To a large extent, its continued existence may depend upon

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[16]Dan Beyers, "New Priorities May Cost the Navy," Defense News, February 29, 1988, p. 3.

[17]Daniel J. Marcus, "Pentagon Forges Budget Shield to Protect Vital C3I Systems," Defense News, April 11, 1988, p. 44.

whether or not the next Administration views the CSI as a political remnant of the Reagan defense program.

The true test of Competitive Strategies will be performed sometime in the future. Will 21st century strategic planners look back and congratulate today's policies as helping to shape a safer superpower competition? U.S. military planners must periodically think about the future because weapons built today will remain in the U.S. inventory for decades. Competitive Strategies provides a needed forum for conceptualizing future U.S. military needs.

ANNOTATED BIBLIOGRAPHY

Beyers, Dan. "New Priorities Plan May Cost Navy." Defense News. February 29, 1988, p. 3+. This article describes the effects of implementing Competitive Strategies on the budget process in general and the Navy in particular. Some mention is made of using war games as a tool for validation.

Carlucci, Frank C. Annual Report to the Congress FY89. Washington, D.C.: U.S. Government Printing Office, 1988. The CSI description in this report is the best to date. Competitive Strategies is defined and the various councils and steering committees are described. In addition, the results of the 1st Task Force are outlined.

Competitive Strategies Office. A Department of Defense Competitive Strategies Primer. Unpublished paper, March 15, 1988. This paper presents the official Department of Defense view of the Competitive Strategies Initiative. It is an excellent source of general information.

Hawes, John H. "Improving the Balance of Conventional Forces in Europe." Current Policy No. 939. This article describes perceived Soviet weaknesses in the NATO/Warsaw Pact balance.

Hines, John G. and Kraus, George F. "Soviet Strategies for Military Competition." XVI Parameters, Autumn 1986, pp. 26-31. This excellent article characterize the Soviet approach to military competition and provides an excellent contrast of U.S. and Soviet strategy and force structure.

Mann, Paul. "Strategic Doctrine for High Technology." Aviation Week and Space Technology, June 15, 1987, pp. 110-114. An interesting article which provides many opinions on Competitive Strategies from DoD outsiders.

Marcus, Daniel J. "Pentagon Forges Budget Shield to Protect Vital C3I Systems." Defense News, April 11, 1988, p. 4+. Description of recent CSI actions to influence the defense budget. Tends to emphasize the C3I aspects of protected CSI technologies.

National Security Strategy of the United States. Washington, D.C.: U.S. Government Printing Office, 1987. Only a brief mention of the CSI program. Note the 1988 version does not mention the CSI.

U.S. Military Posture FY88. Washington, D.C.: U.S. Government Printing Office, 1987. Again, just a brief mention for the CSI program.

Weinberger, Caspar W. Annual Report to the Congress FY87. Washington, D.C.: U.S. Government Printing Office, 1986. Brief definition and description of the CSI.

Weinberger, Caspar W. Annual Report to the Congress FY88. Washington, D.C.: U.S. Government Printing Office, 1987. Brief description now including mention that CSI is being "institutionalized."

Zhurkin, Vitaliy V.; Karaganov, Sergey A.; and Kortunov, Andrey V. "Security Challenges: Old and New." Kommunist, No. 1, 1988, pp. 42-50. An interesting Soviet description of CSI as an economic strategy to bankrupt the Soviet Union. SDI, horizontal escalation, and U.S. technology transfer policies are described as part of the CSI program.

THE MARSHALL PLAN:
A CASE STUDY IN STRATEGIC PLANNING

LT Nancy K. Jenkins

At the end of World War I, American proclivity for isolationism resulted in a withdrawal of all U.S. forces from European soil and a restoration of a pre-World War I existence both internationally and domestically. When the end of World War II arrived, that same desire for isolationism caused Americans to briefly entertain a repeat performance. The domestic sentiment was to "bring the boys home," break wartime European commitments and return to a way of life similar to that which had been experienced prior to the entrance of the United States into the war before the glow faded.

Relief for the war-torn countries was being administered through the United Nations Recovery and Rehabilitation Agency (UNRRA) and the Government and Relief in Occupied Areas (GARIOA) program for the most urgent of needs--food and fuel. Additionally, certain activities that had begun under the Lend-Lease program were being continued.

I. THE EUROPEAN SCENE

The destruction and chaos that prevailed on the European continent, however, was so vast and complete that it

precluded the individual nations from enacting effective recovery programs. Destitution could be witnessed in the lack of basic necessities that resulted in multitudes of people starving and freezing to death. Then, in the Summer of 1947, there was a devastating drought. Although the drought has been credited with producing some of the "finest wines in a generation of memory,"[1] it also led to the worst harvest of crops that Europe had known in approximately 100 years. European dollar reserves were extremely low which threatened a near cessation of the influx of goods from America. By mid-1947, European gold reserves and dollar holdings totalled $7 billion which was neither well distributed amongst the countries nor sufficient to meet the requirements of trade.[2] Additionally, the excessive barriers to intra-European trade that had been established during the inter-war years (quotas, tariffs, and subsidies) were being further complicated by strikes, unemployment and rapidly growing inflation. Europe was as near to collapse as possible.

Owing to all these factors, Britain in effect claimed bankruptcy and turned to the U.S. to request that it assume the burden of assisting the Greek government's attempt to stop a communist supported revolt. Britain could no longer shoulder the financial responsibilities of "Pax Britanica." On 12 March 1947, President Truman submitted a request to Congress for economic and military assistance for both

Greece and Turkey to prevent the expansion of communism. In May 1947, the Congress appropriated $400 million in Greek-Turkish aid [3] and the Truman Doctrine was born. It was known by all that this aid was an interim measure and that the assistance being provided through the UNRRA and GARIOA was but marginal relief activity. By 1947, $10 billion in aid had been given to Europe. All of it had been used on subsistence and all of it was gone.[4] None of these measures had worked toward a restoration of industrial capabilities or even a resolution of the currency situation, both of which would be required for an improvement in Europe's trade and overall economic health. American leaders knew that if these Western European governments fell, political liberty in the region would have ended as well. The result would place the defense and welfare of the U.S. in danger. What was desperately needed was a long-term program that would help rebuild Europe to enable it to take care of itself. A creative approach to the problem was announced in a June address delivered at Harvard by the Secretary of State General Marshall where he unfolded a process by which Europe could be set on the road to recovery.

II. THE PLAN

"The initiative, I think, must come from Europe. The role of this country should consist of friendly aid in drafting of a European program and a later support of such a

program so far as is practical for us to do so."[5] This was the keynote of his Harvard speech--the Marshall plan was envisioned as a European program to be financed by the United States. It had been decided that the aid that was being given had to be linked to specific long-term objectives and not provided in an ad hoc manner that only served to relieve the stress but did not contribute to solving the problem.

The over-arching aims of the Marshall Plan were to stabilize the international economic system such that it would be favorable to capitalism and to prevent the spread of communism beyond the Iron Curtain. The two aims were mutually supportive and it was believed that by focusing on the first, the later would be ensured. The long-term goal of the Plan was to make Western Europe self-sufficient. In order to attain that objective, its industry and its trade had to be revived and both had to be achieved as simultaneously as was possible. Therefore, the specific approach was two-pronged: close the "dollar gap" and build an industrial base that would enable Europe to sell enough to earn its own way.[6] In other words, the Marshall Plan sought to make Europe productive again.

By making Europe self-supporting, it was believed that Europe would be more resistant to communistic pressures, both internally and externally. Initially, the Marshall Plan also attempted to draw Eastern European countries away

from the Soviet orbit[7] through the enticement of capitalist resources. Poland and Czechoslovakia were eager to participate in the program, but were later convinced to reverse their decisions due to Soviet interference. In this regard, the Marshall Plan can be viewed as America's last effort to breakup the Soviet "camp." The German question, however, was also part of the Marshall Plan in that the program depended on an economically vital West Germany. To bring this about, the demand for reparations had to be dealt with. It was hoped that U.S. aid to the West European countries would replace the demands placed on West Germany and keep that Germany looking West thereby preventing it from sliding into Soviet clutches.

The Americans understood the enormity of the challenge and that for the goals to be achieved a sustained commitment would be required. They had the vision, but beyond that there were no clear, logical steps to arrive at this end. The Europeans had to devise that for themselves. Additionally, the Marshall Plan required European administration, for the most part, and a contribution of a united effort by those countries. The problem could not be solved on a country-by-country basis.

Within five weeks of Secretary Marshall's speech, 16 countries had set up the Committee for European Economic Cooperation.[9] It formulated a draft program of cooperative economic arrangements and a report of the collective

requirements for goods and foreign exchange to cover the period of 1948-1952.[10] The U.S. Program Review Division of the Plan served as the U.S. participation in jointly reviewing all the funding requests and the draft program and helped compile it into a single continental strategy. Being motivated in part by the thrill of sharing the American success story with the European nations and, in part, by a desire to ward off another war, Congress appropriated funds and passed the U.S. Foreign Assistance Act of 1948. The Act officially launched Europe and the U.S. on a joint venture for the reconstruction of the western part of the continent in a program entitled the European Recovery Program (ERP). It also established the Economic Cooperation Agency (ECA) to supervise the program. At the same time, Congress approved an additional $600 million to relieve the immediate shortages of food, fuel and raw materials necessary to allow the long-range planning to begin.[11].

In April 1948, the committee that had drafted the program became a permanent body known as the Organization of European Economic Cooperation (OEEC). The first objective of this group was to direct its energies toward achieving liquidity for the purchasing of resources (i.e., closing the "dollar Gap"). It devised a distribution plan for the funds and determined measures that would facilitate growth in trade. These measures included: reducing quotas, creating

credit and providing a mechanism or the settlement of accounts between countries.

For these later two tasks, the European Payment Union (EPU) was set up to act as a type of "clearing house" arrangement for intra-European payments.[12] This resulted in a more efficient use of the funds and an increase in a member's purchasing potential. However, there was a price to be paid for this assistance. Each country was required to submit to a review of its economic policies and, when necessary, take corrective actions; many of which dealt with the rigid quota and tariff systems that had grown up in Europe during the previous two decades. In addition, certain nations were required to make an equivalent amount of aid to neighbors in the form of goods that they lacked.[13]

The Marshall Plan financed investments in new electricity generating plants, oil refineries, industrial renovations and new kinds of farming equipment. The following provides a partial breakdown of the expenditures funded by the ERP:[14]

$849 million--cargo hauling fees

$360 million--EPU, to unfreeze Europe's trade

$5.3 billion--agricultural products
($3 billion went for the purchase of food)

$5.5 billion--industrial products
$1.6 billion--energy shipments
$2.0 billion--raw materials
$1.9 billion--machinery and vehicles

For the period 3 April 1948--1 January 1952, $17.3 billion in Marshall Plan funds were paid through the ECA. "Those

who want to minimize the amount say it was less than Americans spent on their liquor bill for the same period."[15] Yet, an alternative view would be to note that Americans gave $10 million a day for nearly four years to assist European recovery.

Despite the extremely impressive achievements in goods and funds received, the true mastery of the Marshall Plan's strategy was in its drive to bring about a united Europe, at least economically. By the elimination of tariffs, quotas, subsidies and import-export licenses, European industries were led by competition and cooperation. The hallmark of the ERP's achievement was to get Europe, where old national protective barriers prohibited economic growth, to think in new competitive modes.[16] For a number of reasons, the year 1950 stands out as a turning point for the Marshall Plan, the most telling of which is that every single production target was met and surpassed by then. In 1950, the planners and administrators of the Plan had discovered a word for their vision of Europe--integration. An economically integrated Europe was viewed as the solution to making it self-sufficient. In fact, the U.S. Congress had articulated the unification of Europe as one of the program's major purposes in the second appropriation of funds.[17] Integration and the liberalization of trade had been the two tactics utilized in the implementation of the strategy for European recovery and, by 1950, it was working. However, in

1950, the planners were just beginning to realize the true depth of the problems they were working to overcome.

Europe had no anti-trust legislation. Age-old cartels and trade habits were still controlling supplies. Restrictions and unfair practices between industries were controlling and fixing prices as well.[18] It was becoming increasingly evident that business combinations were as much an impediment to competition as the government-sponsored trade barriers, and much more difficult to fix. This was not the only problem being understood in 1950, the second goal of the Marshall Plan--halting the spread of communism--was being threatened.

Earning a loyalty to the democratic way of life through "trickle down" economics was simply not occurring. Continental workers in Europe's slums were not experiencing the same recovery their respective national economies appeared to be enjoying. The result was that communism retained its hold on those voters for whom life had not changed. The planners set out to alter the situation by urging wage increases and prodding lethargic governments to rebuild slum housing.[19] Congress, however, was beginning to throttle-back on the appropriations which correspondingly reduced ERP leverage.

Another 1950 event changed the thrust of the Marshall Plan toward an entirely new direction. Originally, the plan had specifically stipulated that not one penny of the funds

was to be used on any non-productive endeavors, to include military expenditures. The outbreak of the Korean War, however, altered everything. What had begun as an attempt for peaceful reconstruction was instantaneously converted to a new effort--defense and rearmament.

Eight months after the North Koreans had invaded the South, the U.S. directed that every dollar of the Plan's funds was to be allotted to the purpose of rearming Europe.[20] In a way, the Marshall Plan came to an end when the invasion of South Korea occurred. By 1952, every pretense of the Marshall Plan being engaged in economic reconstruction was dropped and the funds ended, albeit readily replaced by financial assistance in the form of military aid. The Mutual Security Agency (MSA) absorbed the remaining effort and contributed an additional $2.5 billion to Europe. The war, however, did generate a type of world-wide effect that served to accelerate recovery in Western Europe.

By the end of the first decade (1958), 17 billion U.S. dollars had been infused into Western Europe resulting in the establishment of a favorable balance of trade, the doubling of foreign exchange reserves, the achievement of the convertibility of all currencies and a GNP growth rate of an average of 5% per annum.[21]

III. CONCLUSION

World War II served to alter the American preference for isolationism by making the United States aware of the fact that its national interests had become "entangled" with those of the free European nations. The Marshall plan was a result of that realization and two years of ad hoc aid being gobbled up by the symptoms of economic collapse without affecting the cause. There had never been an undertaking anything like the ERP and the absence of a blueprint was a guarantee that mistakes, shortfalls and inconsistencies would be experienced. The real uncertainty lay in the degree of success that the program would achieve. The strengths of the plan should serve as lessons for the future, the weaknesses as mere cautionary notes.

The resounding success of the Marshall Plan was based in the factor of recipient participation in the formulation of the program and in the factor of mandatory cooperation that recipients were to contribute. As remains true today, the lack of the resources of population and land that are vital to industrial expansion and trade which plagued the individual nations could only be alleviated through a united endeavor. THe vision of a unified Western Europe may seem to be a possibility for the not-too-distant future, but for the ERP planners in 1947 it probably appeared as a near impossibility in that such an occurrence had no historical precedent. At that time, Europe was a prisoner of its

historical traditions and what was required was an economic revolution--a dangerous undertaking owing to the lack of control that could be exerted over the process.

In having the participants draft a program, the true essence of the problems that needed to be addressed stood a greater chance of being identified than if the plan had been devised by an outsider. Yet, having the U.S. review the plan provided the program with an opportunity for the infusion of fresh ideas and novel approaches to old economic habits. Forcing the participants to tear down the nationalistic barriers to trade was essential; as was exonerating West Germany from crippling reparations. The insight to national behavior that the planners demonstrated was to be commended. It is unfortunate that they lacked the depth of understanding that was required to have foreseen the levels that would not be reached by the "trickle down" concept.

Today we would label specific measures as feedback mechanisms which is something that the implementation of the ERP strategy lacked. If the planners had monitored factors that would have indicated economic recovery at all levels, the realization that the situation of the workers was not improving might have come sooner and more might have been done to correct the problem and thereby further the cause of democratic ideals and the pillars upon which they rest.

It is certain that the Marshall Plan could have been executed with more efficiency, reached more people sooner

and been more complete in the objective of the unification of Western Europe. Yet, to have done so would have required a crystal ball. The clarity of vision with which one can view the past ought not strip the participants of the event the glory that they are due. The measurement of success of the ERP must be in the evaluation of the degree of achievement reached in the attainment of its goals. The thriving economy that exists in Europe today is a tribute to the success of the Marshall Plan and demonstrates the lightness of its imperfections.

ENDNOTES

1. Theodore H. White, Fire in the Ashes: Europe in Mid-century, William Sloane Associates, Boston, 1953, p. 34.

2. Robert Strausz-Hupe and James E. Dougherty, Building the Atlantic World, Harper and Row, New York, 1963, p. 140.

3. Ibid.

4. White, p. 47.

5. Strausz-Hupe and Dougherty, p. 141.

6. White, p. 63.

7. Daniel Yergin, Shattered Peace: The Origins of the Cold War and the National Security State, Houghton Mifflin Co., Boston, 1977, p. 315.

8. Yergin, p. 321.

9. Strausz-Hupe and Dougherty, p. 142.

10. Peter Calvocoressi, World Politics Since 1945 (fourth edition), Longman Group Limited, London, 1982, p. 141.

11. Richard J. Barnet, The Alliance: America, Europe, Japan Makers of the Postwar World, Simon and Schuster, New York, 1983, p. 440.

12. Strausz-Hupe and Dougherty, p. 142.

13. White, p. 65.

14. White, p. 58.

15. Ibid.

16. White, p. 64.

17. White, p. 66.

18. White, p. 272.

19. Barnet, p. 70.

20. White, p. 143.

21. Ibid.

ANNOTATED BIBLIOGRAPHY

BOOKS

Barnet, Richard J., The Alliance: American, Europe, Japan Makers of the Postwar World, Simon and Schuster, New York, 1983. (A review of the making of and the resulting post-war environment.)

Calvocoressi, Peter, World Politics Since 1945 (fourth edition), Longman Group Limited, London, 1982. (An historical perspective of the events since World War II.)

Collier, David S. and Kurt Glaser (eds.), The Conditions for Peace in Europe: Problems of Detente and Security, Public Affairs Press, Washington, D.C., 1969. (A review of the problems and possibilities for a more permanent European Security.)

Deibel, Terry L. and John Lewis Gaddis, Containment: Concept and Policy, National Defense University Press, Washington D.C., 1986. (An examination of the concept of containment and a recognition of Kennan's contribution to it.)

Etzold, Thomas H. and John Lewis Gaddis, Containment: Documents on American Policy and Strategy, 1945-1950, Columbia University Press, New York, 1978. (Illustrates the first systematic attempt by the U.S. to integrate political and military considerations in national security planning.)

Kissinger, Henry A., The Troubled Partnership: A Reappraisal of the Atlantic Alliance, Greenwood Press, Connecticut, 1965. (An assessment of current and future problems and alternative solutions for the Alliance.)

Strausz-Hupe, Robert and James E. Dougherty (eds.), Building the Atlantic World, Harper and Row, New York, 1963. (Traces the historical beginnings of the European Community and America's involvement/interdependence with it.)

White, Theodore H., Fire in the Ashes: Europe in Mid-century, William Sloane Associates, Boston, 1953. (An assessment of Western European Recovery in the post-war environment.)

Yergin, Daniel, Shattered Peace: The Origins of the Cold War and the National Security State, Houghton Mifflin Co., Boston, 1977. (A review of political-military events from 1945-1975.)

MCNAMARA AND PROGRAM BUDGETING: IS THE FIRST "P" IN "PPBS" SILENT?

LCDR N.L. Flacco

I. BACKGROUND

A. PRE-1961 DEFENSE PLANNING

When President-elect John Kennedy formally introduced Robert S. McNamara as his Secretary of Defense in December 1960, the system for defense planning was, as critics charge, "completely unrelated to fiscal reality."[1] The planning cycle was initiated by the annual submission of the Joint Strategic Operations Plans (JSOP), a compilation of individual service plans. These long range plans for force structure and weapons procurement were based on the military's estimate of national security requirements. Costs were generally not introduced.[2]

Outside the Pentagon, the Bureau of the Budget advised the president in setting a budget ceiling for every department of government. The President in turn provided the Department of Defense (DoD) with a general level of defense

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[1]Lieutenant Colonel Mel Stinnett, "The ABCs of PPBS (Planning, Programming, and Budgeting System)," in The Greener Side of Blue, Volume Five, ed. Major Tim Smith (Maxwell AFB: Air Command and Staff College, 1986), p. 1.

[2]William W. Kaufmann, The McNamara Strategy (New York: Harper and Row, 1964), p. 170.

expenditure appropriate to prevailing economic policies. Once the Secretary divided the total budget among the military departments, each prepared a budget submission according to its own functions, units, and plans. Allocations were specified within the ceiling, with additional requirements presented in an "addendum" budget. Each budget and addendum was tabulated in the five resource categories established in 1948 under the first Secretary, James V. Forrestal: Military Personnel, Operations and Maintenance, Procurement, Research and Development, and Military Construction.[3] The Office of the Secretary of Defense (OSD) reviewed the submissions, attempting to balance and reduce the requests. Budget cuts were by and large conducted across-the-board, however, with very little analytical basis.[4]

Defense planning had evolved, then, to a system in which planning was "militarized" and budgeting was "civilianized."[5] Force requirements were developed without regard to cost, and budget cuts were conducted without regard to need.

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[3]Charles J. Hitch, Decision-Making for Defense (Berkeley: University of California Press, 1965), pp. 23-29, 69-70.

[4]U.S. Congress, Senate, Staff Report to the Committee on Armed Services, Defense Organization: The Need for Change, 99th Congress, 1st session, 1985, p. 484.

[5]James Michael Roherty, Decisions of Robert S. McNamara: A Study of the Role of the Secretary of Defense (Coral Gables, Florida: University of Miami Press, 1970), p. 75.

The "required" forces would invariably cost more than the budget allowed, and the process of resolving conflicts led to waste and force imbalance.[6] Additionally, the failure to consider program costs beyond the one-year budget submission provided a "foot-in-the-door" incentive for services to introduce new weapon systems with low first-year costs.[7]

Since the JSOP was essentially a "pasted together" version of the service plans, priorities were independently established, resulting in weapon duplication or gaps. During the Eisenhower years for example, the services were developing as many as 12 separate ICBM systems.[8] Planning assumptions were often mismatched, creating incompatible logistics plans. While the Army planned for a long war of attrition (and counted on the necessary airlift and tactical air support), the Air Force focused on a brief nuclear exchange.[9]

The deficiencies of the defense planning system were highlighted by the president-elect's Committee on the Defense Establishment, chaired by Senator Stuart Symington. The so-called Symington Report characterized the system as a

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[6]Kaufmann, The McNamara Strategy, p. 171.

[7]Hitch, Decision-Making for Defense, p. 25.

[8]Robert P. Meehan, Plans, Programs, and the Defense Budget (Washington, D.C.: National Defense University Press, 1985), p. 5.

[9]Robert S. McNamara, The Essence of Security: Reflections in Office (New York: Harper and Row, 1968), p. 90.

"series of compromised positions among the military services," and recommended far-reaching changes to the organization of the DoD aimed at unification.[10] The incoming Secretary of Defense successfully tabled the report, however, seeking unification through planning reforms.

B. SHAPING THE NEW SYSTEM

McNamara had forced one condition on Kennedy in accepting the position as Pentagon chief: he could choose his own subordinates. Captivated with the application of analysis as espoused in the new book Economics of Defense in the Nuclear Age, McNamara offered the Comptroller job to the author, Charles J. Hitch. Hitch invited Alain C. Enthoven, formerly a colleague in the RAND economics division, to take charge of the new Systems Analysis office. Gregory Palmer described the unique contributions of these key players:

> There were three separate approaches to defense policy, not entirely compatible, all of which influenced the final shape of the system: the management theory of McNamara, the programming budgeting theories supported by Hitch, and the economic theories of Enthoven.[11]

In his transition from industry to the DoD, McNamara brought an active management philosophy and a devotion to

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[10]Michael D. Hobkirk, The Politics of Defense Budgeting. A Study of Organization and Resource Allocation in the United Kingdom and the United States (Washington, D.C.: National Defense University Press, 1983), pp. 80-81.

[11]Gregory Palmer, The McNamara Strategy and the Vietnam War: Program Budgeting in the Pentagon, 1960-1968 (Westport, Connecticut: Greenwood Press, 1978), pp. 48-49.

the cost element of cost-benefit analysis.[12] While McNamara stressed the applicability of industrial techniques to defense, Hitch stressed the differences. He viewed cost-benefit analysis as a device necessary to public organizations in gaining the efficiency provided by market forces in private industry. Analysis could only be performed, Hitch insisted, through the establishment of program budgeting and forward planning. Organizing the budget into outputs, rather than the traditional categories of resource inputs, would facilitate the comparison of alternatives with like missions. Maintaining an extended forward plan would allow cost comparison of these systems over their entire life cycle.[13]

Enthoven introduced economic techniques to answer the question "How much is enough?" Rather than impose an arbitrary ceiling on defense spending, the proper budget could be determined by establishing the point of "diminishing returns" for each program element. In Enthoven's words:

> Instead of working in terms of marginal rates of transformation and substitution, in effect we switched to marginal products and marginal costs. This allowed the Secretary to make his own judgments as to the point at which the

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[12]Roherty, Decisions of Robert S. McNamara: A Study of the Role of the Secretary of Defense, p. 65.

[13]Palmer, The McNamara Strategy and the Vietnam War: Program Budgeting in the Pentagon, 1960-1968, pp. 55-58.

various marginal products were no longer large enough to justify the incurring of extra costs.[14]

The principal architects of the new planning system formulated the needed reforms with two objectives in mind. As McNamara later described them:

> My instructions from both President Kennedy and President Johnson were simple: [first] to determine and provide what we needed to safeguard our security without arbitrary budget limits, but [second] to do so as economically as possible.[15]

In the spring of 1961, Hitch (proclaimed by Enthoven as the "father of PPBS"[16]) outlined the Planning-Programming-Budgeting System (PPBS) to McNamara, recommending it be developed and applied in 18 months. McNamara reportedly gave him six months to have it in operation. His first budget, fiscal year 1963, was to be based on the new system.[17]

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[14]Alain C. Enthoven, "Economic Analysis in the Department of Defense," The American Economic Review, pp. 418-419, cited in Palmer, The McNamara Strategy and the Vietnam War: Program Budgeting in the Pentagon, 1960-1968, p. 61.

[15]McNamara, The Essence of Security: Reflections in Office, p. 87.

[16]Alain C. Enthoven, How Much is Enough? Shaping the Defense Program, 1961-1969 (New York: Harper and Row, 1971), p. xiii.

[17]Henry L. Trewhitt, McNamara (New York: Harper and Row, 1971), p. 86.

II. PPBS IN THE PENTAGON, 1961-1968

The programming phase is the heart of PPBS, designed to bridge planning and budgeting. The budget structure of inputs remained, and the JSOP continued to be the planning vehicle. Programming provided a means to sort the myriad defense expenditures into meaningful program elements. The nearly 1000 elements were grouped into nine mission areas that cut across service lines: Strategic Retaliatory Forces, Continental Defense Forces, General Purpose Forces, Airlift and Sealift, National Reserve and Guard, Research and Development, General Support, Retired Pay, and Military Assistance. Military forces were projected ahead eight years for procurement lead time, while all other programs were projected five years ahead, in the Five Year Defense Plan (FYDP). The FYDP represented a continuously available long range plan, updated by a formal change control program.[18]

Programming, as McNamara described it, "would be a shell without substance, however, were it not backed by a full range of analytic support which operations research and other modern management techniques can bring to bear."[19] Systems analysis provided a means of simultaneously evaluating cost and effectiveness of program alternatives.

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[18]Hitch, Decision-Making for Defense, p. 32.

[19]McNamara, The Essence of Security: Reflections in Office, p. 95.

Enthoven's marginal cost and production data, used to establish procurement and force levels, was an additional product of analysis.[20]

The PPBS cycle would begin with the Secretary providing vague strategic guidance to the Joint Chiefs of Staff (JCS). Military force requirements were determined by the JCS and service planners, and proposed in the JSOP without explicit budget constraints. McNamara's thinking on each area under review was set down in Draft Presidential Memoranda (DPM), written by the Systems Analysis office. While the DPMs specified force levels in each major mission area, budget levels remained unconstrained. As a result, the service budget submissions, based on DPM guidance, were often 20-40% higher than the final budget. Now arranged in nine mission areas, the program elements were cut by OSD to reach an unannounced target budget level. Cost-effectiveness studies, completed in parallel with the service budget submissions, provided the key tool in weighing program alternatives. The reasons for the cuts were summarized in OSD's Program Budget Decisions (PBDs).[21]

The budgeting phase concluded with summation of the pared-down program elements, and conversion to the five traditional accounting categories. Proving a persuasive

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[20]Trewhitt, McNamara, pp. 86-87.

[21]Thomas E. Anger, A Critical Review of Defense Resource Planning and the Role of Analysis (Arlington, Virginia: Center for Naval Analyses, 1973), pp. 6-8.

advocate before Congress, McNamara unfailingly presented the defense budget as a product of cost savings and effective civilian control over an extravagant military. He convincingly argued that for the first time, the DoD was answering "How much is enough?" without establishing arbitrary budget ceilings. Speaking before the House Armed Services Committee in 1965, McNamara testified, "I know of no way in which we could substantially increase our security with the expenditure of additional funds."[22]

III. PLANNING ASSUMPTIONS AND CONSTRAINTS

A. PPBS ASSUMPTIONS--EXPLICIT AND IMPLIED

The stated objectives of PPBS, providing the necessary defense without arbitrary limit and doing so as economically as possible, implied a purely rational process of decision-making. The rational model, however, requires examination of all possible alternatives with perfect information about each. Further, it implies an absence of political accommodation. A more accurate assumption, therefore, bases the PPBS decision process on the limited rationality model. The incremental nature of the decisions made in adjusting the

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[22]Anger, A Critical REview of Defense Resource Planning and the Role of Analysis, p. 8.

comprehensive FYDP falls in between the "muddling through" approach and pure rationality.[23]

The most audacious assumption of PPBS is surely the premise that military requirements can in fact be established without regard to cost. Force requirement statements vary widely depending on whether planning is based on worst-case analysis, which in its entirety would always be too costly, or some lesser level of hostility. That the prudent level of military preparedness could be determined without considering the overall cost is a less than certain concept.

The success of systems analysis in determining the best program choices depends directly on the validity of two key assumptions. It is first assumed that the established set of program categories effectively serves all analytical needs. Allen Schick pointed out that "there are as many ways to classify information as there are analytic perspectives."[24] Failure to choose the correct program categories could result in comparing two systems that don't even fulfill the same requirements. Secondly it must be assumed that the optimal measures of effectiveness are used in the cost-benefit analysis. A simple cost criterion would have shown the cost of an on-station Polaris missile to cost two

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[23]Robert D. Lee and Ronald W. Johnson, Public Budgeting Systems (Baltimore: University Park Press, 1977), pp. 16-17, 91, 107.

[24]Allen Schick, "A Death in the Bureaucracy," Public Administration Review, March 1973, p. 152.

to three times that of a Minuteman, and the system would not have been procured. Using survivable power as a measure, the decision was made in 1961 to double Polaris production from five to ten boats per year.[25]

Finally, two assumptions are implicit in McNamara's stated convictions that shaped PPBS. "The organization and management of the Defense Department must be based on the principle of centralized planning and decentralized operation."[26] That is, centralized planning is assumed to be conducive to effective decision-making and force development. "I equate planning and budgeting and consider the terms almost synonymous, the budget being simply a quantitative expression of the operating plans."[27] Here it is assumed that the budget alone states the defense policy of the United States.

B. PLANNING CONSTRAINTS

Fiscal reality provides the most ubiquitous constraint in defense planning; PPBS is no exception. Hitch himself admitted that "resources are always limited in comparison

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[25]Hitch, Decision-Making for Defense, pp. 72-73.

[26]U.S., Congress, House, Committee on Armed Services, Hearings on Military Posture, 88th Congress, 1st session, 1963, p. 373, cited in Kaufmann, The McNamara Strategy, p. 173.

[27]U.S., Congress, Senate, Committee on Government Operations, Organizing for National Security, 87th Congress, 1st session, 1961, p. 1197, cited in Kaufmann, The McNamara Strategy, p. 169.

with our wants, always constraining our action."[28] While the principal constraint remains the overall budget level, the force structure is ultimately constrained by the military manpower ceiling and the Gross National Product (GNP).

Congress essentially imposed two constraints on the DoD in overhauling the budgeting process. First, the new system was still required to conform to the annual budget cycle. Despite the DoD's repeated feelers as to congressional accommodation of a biennial budget submission, support for the change was not forthcoming. In addition, the budget had to be submitted in a form acceptable to Congress. The conventional appropriation accounts thereby continued to be used in the budgeting phase.

While arbitrary budget ceilings were the nemesis of the PPBS patriarchs, informal fiscal constraints undoubtedly existed throughout the planning and programming phases. Service planners could readily project the anticipated overall budget from past appropriations. This fact was clearly illustrated by James Roherty, who determined that "during the McNamara years the defense budget was divided

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[28]Charles J. Hitch and Roland N. McKean, The Economics of Defense in the Nuclear Age (New York: Athenium, 1986), p. 23.

between the three services in the same percentage terms as before."[29] Moreover, the viability of individual systems in the fact of cost-cutters could be discerned from the record of congressional budget actions. Even the Secretary maintained an overall budget constraint in the form of a White House target that certainly influenced the process.

IV. KEY ELEMENTS OF SUCCESS AND FAILURE

The endurance of PPBS through eight Secretaries of Defense provides a compelling argument to declare the system successful. One Air Force officer observed that "periodic face lifting has shifted the duties of certain participants, changed the titles and formats of documents, and rearranged timetables, but the basic PPBS structure and purpose has remained intact."[30] The essential element of programming, the framework for relating outputs and their costs to military missions, is often cited as the preeminent contribution of McNamara's PPBS.

The survival of program budgeting has facilitated the balancing of military forces by cutting across service lines. Where outputs were readily comparable and

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[29]Roherty, Decisions of Robert S. McNamara: A Study of the Role of the Secretary of Defense, p. 76. The service percentages were consistent with previous budgets only after subtracting the Vietnam buildup expenditures.

[30]Stinnett, "The ABCs of PPBS (Planning, Programming, and Budgeting System),", p. 1.

quantifiable, such as strategic nuclear weapons, PPBS claims its greatest success. By organizing information on spending by output programs and showing how they relate to specific defense objectives, PPBS has also promoted external review of DoD proposals.

The advent of forward planning in the FYDP has allowed anticipation of long range costs and a realistic appraisal of a system's price tag over its life cycle. The incentive for interest groups to insert the "thin edge of the wedge" by starting small and letting costs multiply later has been largely eliminated.

Notwithstanding the considerable effort expended during the period 1945-1960 to introduce operations research and economic theory in defense planning, the inception of PPBS brought broadened and institutionalized analysis to the DoD.[31] Analysis provided a rational foundation for informed decisions. "Where analysis has proved its highest value," James Schlesinger wrote, "is in uncovering cases of gross waste: points at which substantial expenditures may contribute little to any stated objective."[32]

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[31]Anger, A Critical Review of Defense Resource Planning and the Role of Analysis, p. 1.

[32]U.S., Congress, Senate, Subcommittee on National Security and International Operations of the Committee on Government Operations, Planning-Programming-Budgeting: Uses and Abuses of Analysis, 90th Congress, 2nd session, 1968, p. 10.

The most pervasive weaknesses of PPBS are usually considered to lie within the planning phase. That the programming and budgeting phases were dominant during McNamara's tenure is hardly surprising in view of his stated belief that the budget is simply "the quantitative expression of the operating plans."[33] Long-range planning, to be more than a summing of service needs, must be guided by a national military strategy. The Secretary of Defense and JCS failed to proscribe unambiguous defense objectives and overcome the generality of broad political statements of foreign policy. "Lacking clear objectives and policies," Robert Meehan reasoned, "then DoD's approach to force development becomes more, more, more."[34] PPBS left the old JSOP development process virtually unchanged, prompting the OSD to by and large treat the joint plans as irrelevant. Admiral Elmo Zumwalt's evaluation of the JSOP is most telling:

> I found this document to be almost as valueless to read as it was fatiguing to write. Some of its prescriptions were always in the process of being falsified by events. Others were so tortured a synthesis of mutually contradictory positions that the guidance they gave was minimal.[35]

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[33]Roherty, Decisions of Robert S. McNamara: A Study of the Role of the Secretary of Defense, p. 81.

[34]Meehan, Plans, Programs, and the Defense Budget, p. 12.

[35]U.S., Congress, Senate, Staff Report to the Committee on Armed Services, Defense Organization: The Need for Change, 99th Congress, 1st session, 1985, p. 496.

While consistency between plans and the budget were not maintained, attainable plans were not developed in the first place. The reason: realistic budget constraints were not formally considered. Fiscal considerations and cost-effectiveness analysis were conducted too late in the process. The defense strategy, military force level and procurement proposals, and DPMs specifying force requirements were all conducted without explicit regard to cost. The budgets were whittled down to fit a previously unrevealed budget target.

Analysis proved to have a limited impact on program decisions. Aaron Wildavsky considered "the rare analytical study which PPBS officials hold out as proof of advancement is praised because it is unique."[36] Too often analysis is selectively used to suit the political interests or personal proclivities of the decision-maker. According to Schlesinger, "half the time [during the McNamara years] a decision had been foreclosed by high level political involvement."[37] Nevertheless, the OSD Systems Analysis staff swelled in the 1960s, becoming concerned with what was often described as petty details best left to the services.

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[36]Aaron B. Wildavsky, The Politics of the Budgeting Process (Boston: Little, Brown, and Company, 1974), p. 200.

[37]U.S., Congress, Senate, Subcommittee on National Security and International Operations of the Committee on Government Operations, Planning-Programming-Budgeting: Uses and Abuses of Analysis, 90th Congress, 2nd session, 1968, p. 3.

Not even the mix and level of trucks and radios in Army divisions escaped the scrutiny of the OSD analysts.[38]

By removing the services from decision-making, considerable friction was generated between McNamara's "whiz kids" in OSD and senior military officers. After failing to gain appointment for an additional tour of duty as Chief of Naval Operations, Admiral George Anderson provided this insight in a 1963 address to the National Press Club:

> Recommendations of service chiefs, each backed up by competent military and civilian professional staffs, are altered or overruled without interim consultation, explanation, or discussion....The operations analyst--properly concerned with "cost effectiveness"--seems to be working at the wrong echelon--above the professional military level rather than in an advisory capacity to the military who should thoroughly appreciate this assistance.[39]

Under McNamara's successor, Melvin Laird, PPBS evolved to permit a greater service role in evaluation of program alternatives. Analysis became a tool used prior to the budget submission to OSD, and fiscal reality was at last infused into the planning process.

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[38]Anger, A Critical Review of Defense Resource Planning and the Role of Analysis, p. 2.

[39]Roherty, Decisions of Robert S. McNamara: A Study of the Role of the Secretary of Defense, pp. 98-99.

V. ANNOTATED BIBLIOGRAPHY

Anger, Thomas E. A Critical Review of Defense Resource Planning and the Role of Analysis. Arlington, Virginia: Center for Naval Analyses, 1973. (Evaluation of PPBS since 1961 and the declining role of analysis. Now that OSD has relinquished power to the services, the service components should play a larger role.)

Enthoven, Alain C. How Much is Enough? Shaping the Defense Program, 1961-1969. New York: Harper and Row, 1971. (The battle against institutional bias in defense can only be won through the supremacy of the Secretary and systems analysis.)

Hitch, Charles J. Decision-Making for Defense. Berkeley: University of California Press, 1965. (Gratuitous overview of inception and operation of PPBS by its chief architect.)

Hitch, Charles J., and Roland N. McKean. The Economics of Defense in the Nuclear Age. New York: Athenium, 1986. (Eleventh printing of the 1960 book that so heavily influenced PPBS with its blueprint for efficient defense resource allocation.)

Hobkirk, Michael D. The Politics of Defense Budgeting. A Study of Organization and Resource Allocation in the United Kingdom and the United States. Washington, D.C.: National Defense University Press, 1983. (Combines the best features of both systems and proposes a permanent and more powerful PPBS cadre at the top.)

Kaufmann, William W. The McNamara Strategy. New York: Harper and Row, 1964. (An adulatory account of the changes in defense directed by McNamara in the early years.)

Lee, Robert D., and Johnson, Ronald W. Public Budgeting Systems. Baltimore: University Park Press, 1977. (A government budgeting textbook that includes a chapter which traces the development of PPB systems of the 1960s.)

McNamara, Robert S. The Essence of Security: Reflections in Office. New York: Harper and Row, 1968. (Compilation of his speeches and public statements in office.)

Meehan, Robert P. Plans, Programs, and the Defense Budget. Washington, D.C.: National Defense University Press, 1985. (PPBS is unwisely relied upon to formulate coherent strategy and relate it to programs. While inherited programs survive, the requirements often do not.)

Palmer, Gregory. The McNamara Strategy and the Vietnam War: Program Budgeting in the Pentagon, 1960-1968. Westport, Connecticut: Greenwood Press, 1978. (Primary of PPBS allowed rationalists to escalate the war in Vietnam while looking for a programmatic output in the form of a diplomatic signal from the North.)

Roherty, James Michael. Decisions of Robert S. McNamara: A Study of the Role of the Secretary of Defense. Coral Gables, Florida: University of Miami Press, 1970. (Examines the role of the DoD's new management through two case studies: the decisions surrounding a new manned bomber and a second nuclear aircraft carrier.)

Schick, Allen. "A Death in the Bureaucracy." Public Administration Review, March 1973. (Any system of output budgeting is only as good as the costing function chosen.)

Stinnett, Mel. "The ABCs of PPBS (Planning, Programming, and Budgeting System)." In The Greener Side of Blue, Volume Five, edited by Major Tim Smith. Maxwell AFB: Air Command and Staff College, 1986. (Details of today's PPBS cycle and documentation, with a brief historical perspective.)

Trewhitt, Henry L. McNamara. New York: Harper and Row, 1971. (A biography written by a journalist and former DoD colleague.)

U.S. Congress. Senate. Staff Report to the Committee on Armed Services. Defense Organization: The Need for Change, 99th Congress, 1st session, 1985. (The adequacy of PPBS as a substitute for reorganization is examined. Recommends specific changes in OSD/JCS organization to strengthen a weak strategic planning process.)

U.S. Congress. Senate. Subcommittee on National Security and International Operations of the Committee on Government Operations. Planning-Programming-Budgeting: Uses and Abuses of Analysis, 90th Congress, 2nd session, 1968. (James Schlesinger's critique on the application of analysis during the McNamara years.)

Wildavsky, Aaron B. The Politics of the Budgeting Process: Little, Brown, and Company, 1974. (Everywhere program budgeting has been tried, it has failed to meet its own requirements. It is an irrational system that didn't significantly change budgetary decisions in the DoD.)

THE NAVY'S GENERAL BOARD

LT John E. Inman

In the late nineteenth century, the United States was beginning to emerge as a world power. The industrial revolution was in full swing as the nation and the entire civilized world was undergoing a vast metamorphosis. Machinery replaced animal and wind as the source of power in a more modern world. The United States was at the center of this new world as steam power shrunk the apparent distance between the continents. In all, the United States found itself undergoing tremendous changes, at a rate never before imagined possible.

The Navy found itself totally caught up in this era of change. The shift from sail to steam was the most obvious of the changes that the Navy was forced to deal with. Equally important, the Navy was now part of a nation with true global interests, and also a nation with some very powerful potential adversaries. Germany, England and Japan were nations with naval power capable of challenging U.S. interests around the globe. These changes in technology and the world balance of power led many people in the Navy to believe that an organized, formal method of planning was required in order to maintain the force level and degree of

modernization required for the Navy to fulfill its mission in protecting the nation's interests.

In the year 1900, Secretary of the Navy John D. Long authorized the formation of the General Board.[1] The job of this board, composed of highly competent naval officers, was to plan for war. More specifically it sought to plan for war with Germany and Japan, though not exclusively so. The type of war planning the General Board was to engage in dealt with more than just the operations and tactics of naval warfare. It also included planning for the force levels required for the Navy to conduct the wars the General Board envisioned possible in the not too distant future.

The final output of the General Board was a war plan delivered to the appropriate fleet commander. The war plan delivered was not, however, a pure product of the General Board. Before its delivery, it was reviewed amended by the Intelligence Office, the Naval War College and even the appropriate fleet commander.[2] Recommendations for force levels to support the war plans were delivered less formally via memoranda delivered to the Secretary of the Navy.

The General Board never really saw its plans implemented. The war with Germany in 1917 did not develop in the Caribbean as foreseen, since the German fleet was kept bottled up by the British for most of the war. By the time World War II came around, and scenarios much more closely resembling those they envisioned became reality, the General

Board lost its effectiveness and power as a planning body, as the Navy had come full circle and reverted to its pre-1900, more ad hoc planning style.

The General Board's composition, as originally established by Secretary Loop, was as follows. There were to be two categories of membership: ex-officio and individual. The ex-officio members were: the Admiral of the Navy, the Chief of the Bureau of Navigation, the Chief Intelligence Officer, the President of the Naval War College, and the principal assistant of the last two officials: individual memberships were to be three in number of or above the rank of Lieutenant Commander.[3]

The Chief of the Bureau of Navigation was assigned as the custodian of the war plans developed by the General Board.[4] Additionally, he served as the General Board's head in the absence of the Admiral of the Navy. Meetings were required to happen at least once each month, and at least two of the monthly meetings each year were required to include daily sessions of at least one week's duration. After only one year, the composition of the board was changed to eliminate the assistants to the President of the Naval War College and the Chief Intelligence Officer and instead allowed the Secretary of the Navy to designate by name as many members, above Lieutenant Commander, as he desired.[5]

General Board decisions were taken by vote. Each member had one vote, regardless of rank.[6] Admiral Dewey, the original head of the board, was adamant about not permitting senior officers to influence the votes of junior board members. Therefore, he permitted board decisions that he did not agree with to be forwarded over his signature.[7] This attitude was not always popular with soon-to-be retired Admirals that were serving on the board in a non-voting capacity, as they found themselves overruled by voting officers much junior to themselves.

The actual planning process revolved around a group of committees formed to handle the different types of plans required. The most important of these committees was the Executive Committee. It was the function of the Executive Committee to prepare the agenda for the General Board's meetings and to take a preliminary look at material presented to the General Board.[8] Also, the Executive Committee met on a near daily basis and that, combined with its reviewing functions, made it the most powerful committee of the General Board. Originally, other committees were formed by the Board's chairman, assigned tasks to particular members of the Board based on their areas of expertise. After two years, two other permanent committees were formed. The First Committee had responsibility for fleet organization, combined operations with the Army, mobilization plans, and the analysis of foreign fleets. The Second Committee

was tasked with war plans, naval militia affairs, and sea transport.[9]

Originally, the General Board was not going to have a permanently assigned staff to assist in the planning process. This idea was soon abandoned and officers of all ranks were assigned to the Board to help with the administration and to lend expertise to the planning process. Additionally, help could be sought from the War College or from the Bureaus, especially on military matters that required a particular technical knowledge or experience.

One of the key elements in the functioning of the Board to produce its plans was its relationship with the Intelligence Office and the Naval War College. The Intelligence Office served as the Board's source of information. The War College provided extra personnel when needed and served as a type of reviewing or proofing station for the plans the Board authored.

There were some key assumptions made by the proponents of the General Board that made them feel that the old planning system was inadequate. These assumptions dealt mostly with the nature of the next war. It was assumed that the next war would have a very sudden beginning, be very complex in nature and have a very high tempo. The Board's supporters felt that the old ad hoc system of planning was not up to the challenge of preparing the nation for such a war. It was felt that proper planning could be done only by

those who job it was to plan, and not by the Bureau Chiefs who were too busy with the administration of their departments to give any serious effort to the process of preparing effective war plans.

The Navy was not totally void of any planning activity before the General Board came into existence. Each of the Bureaus had plans of their own for various different contingencies. With no central planning system or method of review, these plans were often uncoordinated, and worse, sometimes even directly at odds with each other. However, the parochial attitude of the Bureau Chiefs was strong and thus they felt they knew what was best for themselves and the Navy. They saw the existence of the General Board as an erosion of their power and, in a way, it was. Thus, the old system of Bureaus was a constraint on the planning function of the General Board as the Bureau heads retained the true power base in the Navy.

In addition to the Bureau Chiefs, extremists in the Line Officer ranks sought to constrain the General Board. These officers saw the General Board in the old terms of the Staff versus Line power struggle that had existed in military organizations for decades. The Line Officer community saw the board as a tool used by Staff Officers to wrestle more power away from them and to place them in a subordinate position to the Staff Officers.

Resistance came from outside the military also. Congressional leaders saw two major problems with the General Board. First, they feared the formation of a "General Staff"-type organization as an effort by the Navy to stray from the traditional subordination of the United States military forces to the civilian leadership. Specifically, it was felt that the General Board might reduce the role of the Secretary of the Navy to be that of a puppet. Second, they were very comfortable with the power being held by the Bureau Chiefs because it permitted numerous pork barrel projects from the Navy to appear in their districts.[10]

At the time the General Board was first implemented, there was an attitude both in and out of the Navy, that the General Board was an attempt by some people in the Navy to fix a system that wasn't even broken. Many critics of the General Board pointed to the successes of the Navy in the Spanish-American War and said that those victories vindicated the existing planning system. Proponents of the Board argued that it was Spanish incompetence that led to the United States' victory. In the presence of a formidable foe, the weakness of the Americans' plans would have rapidly become apparent and led to disastrous defeat.

Some real constraints came directly from the office of the Secretary of the Navy. A strong Secretary was required to counter the resistance of the Bureau Chiefs in order for the General Board to be effective. Unfortunately, the

position of the Secretary of the Navy was, at the time, viewed either as a political pay-off or as a stepping stone to a more important position. As a result, between the years 1902 and 1909, there were seven different Secretaries of the Navy.[11] Also, many of the Secretaries were unwilling to resist the Bureau Chiefs even when they supported the Board's ideas. They often believed that maintaining the harmony within the Navy was more important than defending the Board's position.

The original strategy used in the formation of the General Board involved first establishing the Board, and then once in existence and functioning well, to make it a permanent structure through legislation. Ironically, this strategy of establish first and legislate later not only led to the formation of the Board, but also led to its demise as the central planning body for the Navy.

Without the formal backing and legitimacy that congressional legislation of the Board brought with it, the board was doomed to failure. Despite the fact that the Congress had approved the formation of a similar body for the Army, it was reluctant to do the same for the Navy. This was blamed, in large part, on poor salesmanship of the General Board by the Navy. Since there was no law supporting the General Board, when the first real crisis arose (World War I), support for the Board evaporated and planning responsibilities reverted back to the Bureau Chiefs.

One of the reasons support so rapidly vanished for the Board is the methods used by its supporters to gain a legislative sanction. Board supporters were accused of resorting to "muckraking and chicanery" in order to gain the backing they needed. These tactics backfired and instead of support they only fostered ill-will toward the formalizing of the General Board.

One of the failures of the Board itself centered around logistic support. It was easy for those opposed to the Board to use the Board's own plans against it since they were not well thought out where logistics was concerned. Not that there were necessarily any better plans around at the time but the Board just shot itself in the foot with its oversight on logistics. Additionally, the General Board never established any workable system for the implementation of the plans it formulated and thus the Board's plans rapidly deteriorated into little more than an intellectual exercise rather than effective war plans. As a result, operational commanders rarely took the plans formulated by the General Board as seriously as the planners did.

Support was eroded even further by over-optimistic support. This came in two forms. First was the idea that the General Board was a type of cure-all that could solve all the Navy's problems. Second was the support from those who saw the General Board as a stepping stone to a fully formed General Staff system for the United States. Neither

of these two factions endeared the idea of a General Board to the Congress or other civilian leaders.

With the onset of the crisis in Europe in the 1910's, serious war planning reverted back to the Bureau Chiefs and the General Board concept was never given a chance to prove its worth. Though the General Board continued to exist into the 1940's, any power or influence as a planning organization was gone by the end of the first World War.

The overall goal of the General Board was to prepare the Navy for the next war. In order to accomplish this it sought to centralize Navy planning into a single body, with people, tools and time to formulate well thought out and executable war plans. This noble cause rapidly degenerated into a bureaucratic power struggle over who was to do the planning for the Navy. The onset of a crisis brought a premature end to that struggle as the nation opted to stay with the old system when danger arose, rather than put its faith into an unknown and unproved system. With victory came vindication for the old Bureau system and the General Board would have no chance to reassert itself in the inter-war years.

ENDNOTES

1. D.J. Costello, Planning for War: A History of the General Board of the Navy, 1910-1914 (Ph.D. Dissertation, Fletcher School of Law and Diplomacy), p. 1.
2. Ibid., p. 35.
3. Ibid., p. 24.
4. Ibid., p. 25.
5. Ibid., p. 30.
6. Ibid., p. 32.
7. Ibid.
8. Ibid.
9. Ibid., p. 34.
10. Ibid., p. 5.
11. Ibid., p. 117.

BIBLIOGRAPHY

Costello, J.C., Planning for War: A History of the General Board of the Navy, 1900-1914. Ph.D. Dissertation, Fletcher School of Law and Diplomacy, 1968.

I was unable to find any writings more current on the subject of the Navy's General Board. This thesis served as an excellent source of information, but it was frustrating being unable to compare any interpretations of the events or to even be able to check many of his sources.

UNITED STATES INTER-WAR PLANNING--FROM ORANGE TO RAINBOW

LCDR Jan G. Rivenburg

This case study is of United States war planning between World War I (WWI) and World War II (WWII), primarily from a naval, Pacific perspective. This study should start with an understanding of the environment surrounding the plan. In short, post-WWI, the U.S. saw a changed world, especially in the Pacific. Japan had been granted a United Nations Mandate over the former German island chains, the Marshalls, Carolines and Marianas. This decision made a recent acquisition of the U.S., the Philippines, extremely difficult to protect, as the islands were astride the U.S. Sea Lines of Communications (SLOCs). The Japanese acquisition also complicated the support of the "Open Door" policy of China. Japan herself had already begun to flex her newly developed national power, as evidenced by her victories in the Sino-Japanese and Russo-Japanese Wars.

The Atlantic arena appeared more stable, although the possibility of a British conflict was not discounted, she being one of the few remaining strong European powers. This theme resided with those who supported the Mahanian concept that a nation's strength resided in cultivating overseas markets. Finally, a basic fact the planners had to contend with was how would the U.S. support the Monroe Doctrine.

Briefly, this was the world that military war planners faced--the Pacific was the most volatile. As early as 1907, President Roosevelt requested advice on what should be done to protect U.S. Far East interests.[1] By 1924, the first war plan, against Japan (named "Orange") was officially accepted. Other contingency plans were also developed ("Red"--Great Britain, "Black"--Germany, and "Green"--Mexico). The Orange plan was revised officially at least five times by 1938, notwithstanding continual review within the War and Navy Departments.

By the late 1930s, the international arena had changed significantly (in the Atlantic). In 1939, war plans were designed (the "Rainbow" Plans) in five combinations that differed by enemies, allies, and defense spheres. The Rainbow Plan soon to be operative, Rainbow 5, envisioned the U.S. assisting France and Great Britain, and fighting in Europe, Africa or both.

All the Rainbow Plans envisioned some type of hemisphere defense and envisioned fighting more than one enemy. During the years of planning, many scenarios were envisioned, including those of enemy surprise air attacks. Some plans attempted to fight a "two front" war with limited resources. These exercises forced war planners to make some joint decisions between the Navy and the War Department.

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[1]Louis Morton, Strategy and Command: The First Two Years, United States Army in World War II Series, The War in the Pacific (Washington, D.C., 1962), p. 23.

Overall, the war planning effort was successful--the U.S. did defeat first Germany, and then Japan, her primary enemy in the Pacific. These Rainbow/Orange war plans tried to delineate how, what, where and when to fight. These plans were not necessarily designed on how to deter a war.

The war planning process started in 1903, with the formation of the Joint Army Navy Board, composed of four individually appointed members from each service. This first group, advisory only, was established by the Secretaries of War and Navy to enhance service cooperation. Little was accomplished until a second subgroup was formed in 1919, the Joint Planning Committee. Its members were generally from each service's war plans divisions. The joint committee could undertake study independently, without direction from the service secretaries.[2]

The committee was to present its conclusions to the board. It would then present the plans to the service secretaries for approval. Presidential approval might or might not occur. Each service could initiate action itself.

In December 1921, the Army planners submitted a "Preliminary Estimate of the Situation" to the Planning Committee. This action spurred a Navy input by July 1922. By 1923, a joint plan was recommended by the Senior Joint Board member

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[2]Ronald H. Spector, Eagle Against the Sun (New York: The Free Press, 1985), p. 56.

to the Secretary of War and Navy, who gave their approval to the first War Plan Orange in September 1924.[3]

At times, those "in the field" (i.e., the Philippines) prompted plan reviews. This occurred in 1934 (after the Tydings-McDuffie Act). Both the Army and Navy were dismayed at the contradiction between national policy and military feasibility. They knew the Philippines could not survive a Japanese attack.[4] Just the opposite of this process was the "top-down" approach. An example of this was the direction in 1928 of the Joint Board, to the committee, to prepare a plan that was based on the concept of a "strategic offensive."[5] A top-down approach later in November 1938 set in motion the memo presented in April 1939 that became the basis of the five new color Rainbow plans.

The planning process also had to adapt if international changes prompted the Secretaries of the War and Navy to call for reviews of the plans. Simultaneous with one such request in 1935, the Joint Board requested a State Department representative. Here, the diplomatic, civilian

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[3]Morton, Strategy and Command: The First Two Years, p. 30.

[4]Morton, Strategy and Command: The First Two Years, p. 37.

[5]Memo, JB for JPC, 26 Jan, sub: Joint Army-Navy Basic War Plan ORANGE, JB 325, ser. 280 cited by Morton, p. 34.

personnel were seen as required in the planning process in view of the seriousness of the potential Pacific enemy.[6]

As the international situation in the late 1930s became even more ominous in 1939, President Roosevelt changed the reporting relationship of the Joint Board.[7] It now reported directly to him, although still via the respective secretaries. Also, although not formally in the planning process, similar war planning talks occurred at informal "War Council" meetings, composed of the President, his military advisors, the Secretary of State, War and Navy and the service Chiefs.[8]

Later, the planning process became intertwined with the concerns of the U.S. allies. The Washington Staff Conferences, begun in 1941, which produced ABC series plans that committed U.S. forces, had to be considered.

Finally, the Navy "gamed" these plans at the Naval War College. In fact, as stated by Admiral Nimitz, "the courses were so thorough that nothing that happened in the Pacific War was strange or unexpected."[9] This type of statement is

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[6]Morton, Strategy and Command: The First Two Years, p. 37.

[7]Morton, Strategy and Command: The First Two Years, p. 72.

[8]Morton, Strategy and Command: The First Two Years, p. 84.

[9]Grace P. Hayes, "The Joint Chiefs of Staff and the War Against Japan" (History division JCS, MS copy in National ARchives), pp. 4-5 as quoted by Spector, Eagle Against the Sun, p. 57.

gratifying, yet should circumstances have been different, the wrong games might have been played. This gaming was not a formalized process of the strategic planning, but it probably influenced many of those personnel capable of making force planning and tactical operational planning decisions in the late 1930s. This same informal system exists today, with leading personnel involved in the gaming system.

The single, overriding assumption of Rainbow Plan 5 was the concept of defeating Germany first. This led directly to the second key assumption, which had been recognized and warned about from the beginning--the Philippines would be lost. The Army would attempt to hold out, but the main warfighting would be a later naval offensive. The development of the "loss of the Philippines" was present in the initial Orange Plans; by 1936, the loss was clear. The first Orange plan in 1924 had aimed to "hold Manila Bay as a base for the navy until superior American seapower arrived."[10] By 1936, this assertion had lessened to only holding the entrances to Manila Bay. The Army did not even plan for reinforcements.

Constraints on the overall war planning process may be viewed from different perspectives. From the "nuts and bolts" level, the planners had to decide who would be the

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[10]Joint Army-Navy Basic War Plan Orange, March 12, 1924, Record Group 94, National Archives, Washington, D.C., as cited by Spector, Eagle Against the Sun, p. 56.

enemies and/or allies of the U.S. Germany's signing of a Non-Aggression Pact with the Soviet Union in 1939, and then later Japan's signature to the Non-Aggression Pact with the Soviet Union in 1941, all began to clarify further the sides of a future war.

"Absolute" military constraints existed in regards to "hardware." What will the U.S. fight with? Both the Washington Naval Treaty (1922) and the London Naval Treaty (1930) limited capital ship tonnage. As important to tonnage was the agreement in the Four-Power Naval Agreement of the 1922 treaty, which in effect prohibited the U.S. from fortifying any islands west of Hawaii. The Navy war planners had felt a 2:1 tonnage ratio was required to support the U.S. Far East policy, and further had assumed the availability of advanced bases.[11]

Geographical constraints were basic. The defense of the Philippines either rested on a 7,000 mile voyage from the West Coast, or a 5,000 mile voyage from Hawaii, the major Pacific base. Finally, when considering military constraints on the planning system, a "roles and missions" controversy was evident between the Army and the Navy.

Political constraints occurred at the highest level. President Roosevelt declined to consider the request of the Joint Army-Navy Planning Committee to allow Under Secretary

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[11]Charles H. Melhorn, Two-Block Fox (Annapolis: Naval Institute Press, 1974), p. 85.

of State Sumner Welles participate in the Washington Staff Conference--the conference was for the technical, military planning personnel.[12] In June 1941, upon conclusion of the ABC-1 Agreement produced by the conference, upon which a new Rainbow 5 was developed, President Roosevelt signed neither. This diplomatically signalled that the plans would only become effective upon the initiation of war. Both were approved by the Joint Planning Committee, the Joint Board and the Secretaries of the Navy and War Departments.[13]

Other high level political actions affected the content of the war plans, and hence, the war planners. Due to sensitive, secret diplomatic measures being conducted (meetings in New York and in Washington, D.C., 1941) with Japan, State Department officials would not allow fleet posturing (to hinder any possible successful negotiations). Yet military planners felt that for effective war plans, or for any effective execution of the plans, the fleet had to be prepositioned.

Lastly, in the civilian, political arena, Congressional constraints, not only on budgetary matters, affected the

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[12]Herbert Feis, The Road to Pearl Harbor: The Coming of the War between the United States and Japan (Princeton: University Press, 1950), p. 165, note 2, as cited by Robert J. Quinlan, "The United States Fleet: Diplomacy, Strategy and the Allocation of Ships (1940-1941)" in American Civil-Military Decisions, ed. Harold Stein (Birmingham: University of Alabama Press, 1963), p. 163.

[13]Quinlan, "The United States Fleet: Diplomacy, Strategy and the Allocation of Ships (1940-1941)," p. 168.

process. The 1934 Tydings-McDuffie Act, which granted Philippines independence by 1946, created uncertainty as to force availability and desired levels of military involvement in the mid-1930s.

Personalities also affected the planning process. One example was an early attempt for more realism by the planners in 1922-23 concerning the fate of the Philippines. However, General Leonard Wood, former Army Chief of Staff and an influential personage with the Harding Administration, personally wrote the Secretary of War in 1923. The essence of his thoughts were that one could not plan for the loss of the Philippines--this was inexplicable for America's prestige. Thus public opinion, which guided the nation's political leaders, was a factor that the military war planners could not control, but had to account for.

As a point to consider in the final analysis, the Orange plan itself evolved over at least 25 years. It was revised at least five, possibly eight times by 1939.[14] With this passage of time, and the simultaneous resulting numbers of revisions, the plan gained flexibility. Time itself fostered this, for the planners had to respond to different military and political constraints, different force structures, and even had to attempt to factor in new weapon

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[14]USDN, Basic War Plan Orange (WP-13, WP-14), Secret, March 1939 cited by Melhorn, Two-Block Fox, p. 103.

systems. By the time the first Rainbow plans were devised, much background planning had occurred.

The planning process did not, in itself, resolve primary differences of perceptions of war goals between the Army and the Navy. By the 1930s, this could not be avoided--the classic "roles and missions" controversy developed. Should the Army's primary mission be to defend the continental U.S.? If yes, then a defensive position was required in the Pacific (using the triangle formed by Alaska, Oahu and Panama), and the Navy should simply defend the SLOCs. The Navy planners thought went to their basic beliefs of warfighting strategy--one must fight the enemy. Should that be Japan, then an offensive, attacking strategy should be utilized.

These basic decisions were not resolved, apparent in both the 1937 and 1938 plans.[15] In 1937, a compromise plan from the committee was finally submitted to the joint board. In 1938, the joint board had to force even a compromise out of the committee by appointing two personalities, General Embick and Rear Admiral Richardson, to get the plan approved out of the committee. The result was, predictably, a vague plan. However, even these vague compromise plans had made progress in terms of the general idea of, for instance,

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[15]Morton, Strategy and Command: The First Two Years, p. 38.

eventually advancing westward to regain the Philippines. Exact time schedules were not formulated, but concepts were.

Much is written on the civilian versus military conflicts in the war planning. The civilians appeared to be spreading the responsibilities of the U.S. military forces too thinly. Although the basic Rainbow plans had been decided, decisions made in 1940-41 could and would greatly affect their implementation. Questions on defending Hawaii, the Philippines, supporting the British in Singapore and in the Atlantic and the methods and manners in which the U.S. assisted in Atlantic naval patrols all affected the disposition of the fleet. The dilemma was where will one's forces have the greatest impact, without jeopardizing one's interests in other areas, as well as other future commitments. Thus, criticisms that the U.S. and military postures were at odds are correct, yet the situation of the U.S. recovering from the Depression in the 1930s, and certainly the earlier isolationist sentiment of the 1920s, cannot be divorced from the realistic war planning. Although writing war plans involved primarily a military viewpoint, some realistic constraints were surrounding these efforts.

Another example of a military-civilian conflict occurred after Japan abrogated the Washington Naval Treaty in 1934. The military war planners desired fortification of the U.S. possessions. However, politically, the civilian political leadership felt this was undesirable. The need to fortify

Guam in the late 1930s was ignored as the Congress, "after a heated debate, rejected the board's recommendations for fear of offending Japan."[16] The planners were then forced to continue their war plans assuming non-defensible islands.

Of interest, the military war planners did need "civilian guidance." Without this key element, the war plans could have been politically and strategically insignificant.

> By April, 1940 the planners had gone about as far as they could without having an explicitly approved basis for assuming what the European colonial powers would do. This, although not prerequisite to planning for joint action by the U.S. and British Navies--already well advanced on the basis of the President implicit approval--was a sine qua non even of a hypothetical exploration of the politically explosive question of sending U.S. Army forces to defend European colonial possessions in the Far East.[17]

In other words, the planners needed to ensure that they had the "big" picture right.

As it became clearer that the war would involve a coalition, this prompted the secret joint American-British meetings in early 1941. Various revisions to all the Rainbow plans had occurred throughout 1939-1940. In October 1940, the CNO and his staff reviewed options. Their result was a memo named "plan Dog," which although it did not have

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[16]Morton, Strategy and Command: The First Two Years, p. 43.

[17]Maurice Matloff and Edwin M. Snell, Strategic Planning For Coalition Warfare 1941-1942, United States Army in World War II Series, The War Department (Washington, D.C., 1953), p. 10.

presidential approval, it had implicit approval. With this memo, and further meetings prior to conversations with the British, successful allied meetings were held. The main objectives of American national policy were decided upon. The "United States should stand on the defensive in the Pacific with the fleet based on Hawaii...the President laid down a policy to govern the United States in case of war--the maintenance of material aid to Great Britain."[18] The military planners could now clearly design the plans that "fought Europe first."

Of interest also is the assumption in all the plans, reasonably clear by the late 1920s, that the U.S. might have to fight its way back to the Philippines. This may have contributed to the development of the importance of the aircraft carrier. Melhorn states that,

> ...having decided that the only feasible route to the Philippines lay through the Marshalls and the Carolinas, and acting on the assumption that passage through these archipelagos would be contested, they had no choice but to equip the fleet so that it would be able to force passage ...air superiority was essential...and air superiority meant carriers.[19]

Aircraft carriers, for all intensive purposes, had not been limited by the Washington Naval Conference.

Key elements of the inter-war war planning effort are developed by analyst Edward S. Miller. He writes that by

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[18]Matloff and Snell, Strategic Planning For Coalition Warfare 1941-1942, p. 29.

[19]Melhorn, Two-Block Fox, p. 106.

1914, "the Navy had worked out the basics of a grand strategy to defeat Japan." Three phases of the war would occur: 1) Japan would strike by surprise, 2) the U.S. would mobilize by transferring units from the Atlantic fleet, and 3) an amphibious advance would presage blockade and bombardment. To Miller, from 1914-41, the Navy simply conducted "campaign" planning.[20] Miller divides the war planners into the "thrusters" and the "cautionaries." Simply put, the thrusters generally wanted to advance as quickly as possible across the Pacific, and the cautionaries desired slower, more defensive approaches. He states the cautionaries came to dominate the planning. However, the three phases of the war had been finalized.

Miller states that after the assumption was accepted by all to fight Germany first, that the Pacific campaign planning was relegated to the fleet commander. Thus, the final prewar plan was developed by Admiral Husband E. Kimmel. The advantage to this was that he could now do the details. Once the national priority had been finalized, the military, both army and navy, could get on with the job. Miller states that the Orange route (that of Phase II) to begin "leap-frogging" towards the Philippines, simply waited two years into the war.

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[20]Edward S. Miller, Lessons of War Plan Orange for Maritime Strategists (Monterey, Naval Postgraduate School, 1987), pp. 4-5.

Miller states several observations that he viewed as essential to the plan's success.[21] They include the following: 1) the clear articulation of the goal of the war and the strategy to do so, 2) a statement of the correct strategic principles, 3) the structuring of the war into phases, 4) recognition of the decisive theater of war (near the Japanese homeland), 5) service-wide commitment to the strategy, and 6) that good naval war plans occurred as of a result of uniformed professionals, not a joint or civilian body. Miller's view is that the Navy actually did most of the planning, and that the army was only supplementary. Although much of the island-hopping obviously involved a projected sea force, whether or not the Pacific could really have been won by the Navy alone, is not clear. Joint planning efforts, although at times controversial, had eventually put the Pacific war into an overall framework. This included ensuring the non-viability of the continental U.S. shores, which by the Army planners overall cautionary approach, made this happen.

One naval analyst, Commander Michael A. Shelton, states a key factor in correct war planning is to correctly assess the enemy's warfighting capability. The fact that Japan had a strong, battle-tested, long-legged navy (with air power), combined with the importance that the Japanese Army placed

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[21]Miller, Lessons of War Plan Orange for Maritime Strategists, pp. 21-22.

on the Navy for logistical support (adding to its value), made it a threatening force. Thus to defeat Japan, one had to attack her primary weakness, her dependence on oil. Simply build enough weapons and platforms, and mobilize enough manpower to last longer.[22] To him, the major weakness with the war plans was that the U.S. did not have enough assets initially, and also did not start with the proper appreciation of a new weapon, the airplane. But, overall, a more basic decision to fight the Japanese in the Philippines (as occurred at Leyte Gulf), in a decisive battle, was key to the plan's overall success.

Thus, were these war plans, first "Orange," and then the "Rainbow" series, effective? The almost 20 year development of the different plans by the Army and Navy War Departments was certainly not always smooth. Decisions were often not even made; only weak compromises. But, when war did "break out," the ideas and thoughts of how and when to fight at least had been envisioned by some personnel, both military and civilian. The basic Rainbow 5 had foreseen some of the essential warfighting requirements. Some fleet prepositioning had been accomplished. Although tactical changes would occur throughout the war, the efforts of the interwar planners did advance some of the basic goals and problems that the war would bring to the U.S.

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[22]CDR Michael P. Shelton, "Plan Orange Revisited," Proceedings 110 (December 1984), pp. 52-55.

ANNOTATED SELECTED BIBLIOGRAPHY

Matloff, Maurice, and Edwin M. Snell, Strategic Planning for Coalition Warfare 1941-1942, United States Army in World War II Series--The War Department. Washington, D.C.: Office of the Chief of Military History, Department of the Army, 1953. Part of the U.S. Army history series of World War II. Detailed analysis with extensive primary source referencing.

Melhorn, Charles M. Two-Block Fox--The Rise of the Aircraft Carrier, 1911-1929. Annapolis: Naval Institute Press, 1974. Develops the rise of the aircraft carrier as a weapon of war.

Miller, Edward S. Lessons of War Plan Orange for Maritime Strategists. Monterey: Naval Postgraduate School, 1987. Analysis compares the contemporary "Maritime Strategy," published by the U.S. Navy, with the basic concepts of War Plan Orange.

Morton, Louis. Strategy and Command: The First Two Years, United States Army in World War II Series--The War in the Pacific. Washington, D.C.: Office of the Chief of Military History, Department of the Army, 1962. Part of the U.S. Army history series of World War II. Detailed analysis with extensive primary source referencing.

Quinlan, Robert J. "Diplomacy, Strategy and the Allocation of Ships (1940-1941)." In American Civil-Military Decisions--A Book of Case Studies--The United States Fleet, pp. 153-199. Edited by Harold Stein. A Twentieth Century Fund Study. University of Alabama Press, 1963. Eleven case studies are presented of U.S. decision-making.

Shelton, Michael W. "Plan Orange Revisited." Proceedings, 110 (December 1984): pp. 50-56. Short analytical article comparing war planning against Japan with that as planned against the Soviet Union today.

Spector, Ronald H. Eagle Against the Sun. New York: The Free Press, 1985. Relatively recent book written on the War in the Pacific.

THE B-36/USS UNITED STATES CONTROVERSY

Arthur D. Holmes

I. BACKGROUND

The B-36/USS United States controversy arose in the late 1940's as the focal point of a larger debate on the future of U.S. military strategy. Both the Navy and the Air Force had calculated the forces they would need to prosecute a future war against the Soviet Union. This case is an interesting study for strategic planners not in how each service arrived at its own calculations of force structure but rather in how it established the framework for the United States to arrive at a national consensus on national strategy questions up to the present. Many of the ways this debate was carried on in Washington and in the press can be seen as the prototype of how the largest issues of strategic planning have been decided in the United States ever since.

In the years immediately after the end of the Second World War the United States faced a critical period in which a new national security strategy and the bureaucratic structure is to implement it had to be created in addition to the physical destruction that Europe was left in, the United States found its interests were rapidly diverging from those of the Soviet Union, a former ally. Although there had been

a hope in the United States that the wartime alliance with the Soviets might have established a basis for mutual trust, it soon became apparent that the Soviet Union, under Stalin's leadership, was making a concerted effort to politically and military dominate as much of Europe as possible. Faced with a heightened appearance of hostility from the Soviets, a prostrate Europe that was in no condition to defend itself, and a war weary populace that had little understanding of the Soviet threat, the country's political and military leaders struggled with the problem of how to economically fashion a strategy that would keep the Soviets at bay while Europe was rebuilt.

Within this historical context of searching for a new strategy the U.S. Navy found itself ill-prepared to "sell" its contribution to the new strategic thinking. In the years immediately after the war the Navy found itself under siege bureaucratically, fiscally, and strategically. The National Security Act of 1947, which the Navy had lobbied and testified before Congress against, had created the Air Force as a separate service and reduced the Navy from being a separate cabinet level department to being on equal status with the Army and Air Force under a new layer of bureaucracy in the Defense Department. Fiscally, the Navy felt frustrated because President Truman was keeping a tight spending ceiling on the Defense Department budget during the immediate postwar years. With the defense budget limited by

the President, the three armed services were set against each other in an annual budget battle. The Navy faced an uphill fight in these budget battles because Congress, the public, and the defense academic community were all enthralled with the role which atomic bombs would play in any future war. The importance of atomic bombing in future wars had so enthralled every faction in the post-war defense debate that the Navy leadership found little interest on the part of Congress or the civilian leadership of the Truman Administration to take the Navy's role in any future conflict seriously.

When the Secretary of Defense, Louis Johnson, preemptorily cancelled the Navy's proposed large deck carrier, the USS United States, in the spring of 1949, the Navy military leadership set about to find a forum in which to set out their concerns about the future U.S. military force structure. The forum the Navy received to state its case was a two part series of hearings before the House Armed Services Committee during August and December of 1949. The hearings were ostensibly called to investigate charges leveled against the Air Force's B-36 bomber procurement program but were ultimately broadened to a debate on what the national military strategy should be and whether or not the unification of the armed forces in the Department of Defense was effectively serving the national interest. Although these hearings did not result in any concrete action (other

than getting the CNO fired), they at least gave the Navy an opportunity to state its concerns about the direction in which national military strategy seemed to be heading. Ultimately the framework of atomic age military strategy and the continuing importance of conventional military force (including the Navy) was made clear not by bureaucratic infighting in Washington but by the outbreak of the Korean War in June of 1950.

II. THE SYSTEM

The bureaucratic system for planning and managing national security questions in 1949 was roughly analogous to the system as it exists today in the Executive Branch. The National Security Act of 1947 had created the Department of Defense (known between 1947 and 1949 as the National Military Establishment), the National Security Council (NSC), the Central Intelligence Agency (CIA), and the Air Force. The Army, Navy, and Air Force were each headed by a civilian Secretary who was subordinate to the Secretary of Defense. While the Planning, Programming, and Budgeting Systems (PPBS) did not come into existence until the 1960's, the three services submitted their annual budgets to the Secretary of Defense who in turn submitted them to the President for presentation to Congress. The whole Executive Branch budget was coordinated for the President by the Bureau of the Budget which was headed by a Director.

The reorganization of the military establishment in 1947 caused Congress to reorganize its committees which were charged with overseeing military matters. The two houses of Congress each created an Armed Services Committee which, together with the House and Senate Appropriations Committees, were the principle Congressional oversight bodies concerned with the Department of Defense.

Within the uniformed military services the Joint Chiefs of Staff (JCS) were charged with being the principal military advisers to the President. The Commandant of Marines was not yet a member of the JCS and the position of Chairman of the JCS was not formally created until the National Security Act of 1947 was amended in 1949. For questions of strategy the JCS was advised by the Joint Strategic Survey Committee.

In addition to the formal bureaucratic structure for managing national security issues, the "system" for deciding these issues also contained informal and unstructured methods of influencing the decision question. Anyone familiar with how issues are decided today in Washington would find the use of publicity, information leaks, and the involvement of defense contractors in assisting different factions in the debate, which were elements of the B-36/USS United States controversy in 1949, to be very familiar.

In the late 1940's nationally distributed magazines played a much more important role in influencing public

opinion than they do today. It is not surprising then to understand that the Air Force and Navy partisans who wished to sway public opinion to their position took to the pages of the Reader's Digest and the Saturday Evening Post to make their case directly to the public. The role of press leaks and how defense contractors became involved will be explained when the sequence of events leading to the House Armed Services Committee is covered.

Just as the formal and informal structure and methods of planning strategy in the late 1940's would seem familiar to a Washington insider today, the use of the budgetary process as a battleground for alternative strategies wold also be familiar. With President Truman adamant that the defense budget be maintained within established limits, the decisions as to which weapons systems would be procured with the limited funds available were clearly where the nation's military strategy was also being decided. If the President was adamant that the overall defense budget could not be raised and if the enthusiasm for atomic bombing was giving the Air Force B-36 budgetary priority over the Navy's programs, then it was clear to the uniformed Navy leaders that they would have to convince Congress that the B-36 and atomic bombing were not going to have a decisive effect on winning future wars.

III. ASSUMPTIONS AND CONSTRAINTS

The bottom line of the B-36/USS United States debate was the question of how important strategic atomic bombing was going to be in any war in which the United States became involved. One of the reasons that feelings ran so high on both sides of this debate was because the uncertainty about how the advent of nuclear weapons was going to change the nature of war left both sides in the debate unconstrained in making a wide variety of assumptions about the implications of nuclear weapons.

Those people who favored building the B-36 assumed that the advent of nuclear weapons would decisively change the nature of war. Perhaps because of the dramatic suddenness with which the atomic bombing of Japan had brought that nation to surrender, it was assumed that no nation subjected to strategic bombing of its industrial base with nuclear weapons could continue to wage war. By 1948 it had become clear that the Soviet Union was the new major adversary of the United States. In planning for a war with the Soviet Union strategic bombing advocates assumed that the United States would feel no compunction to immediately commence an all-out strategic nuclear attack on the Soviet Union upon the outbreak of hostilities. In making this assumption these planners were relying on the underlying assumption that the United States would continue to enjoy a monopoly on nuclear weapons for as long as perhaps 20 years. This

assumption was shattered in September 1949 when atmospheric measurements revealed that the Soviets had exploded their first atomic bomb. In the rush to see the atomic bomb as the ultimate weapon and the ultimate guarantor of peace those persons who favored the reliance on nuclear weapons also assumed that the only thing preventing the Soviets from overrunning Europe was the deterrent of nuclear retaliation from the United States.

In opposing a predominant reliance on the ability of nuclear weapons to keep the peace or restore peace if war broke out, the senior officers of the United States Navy looked to the future with a completely different set of assumptions. Their assumptions were colored by the fact that they had to almost all experienced the Second World War as commanders in the Pacific Theater and had seen a war in which overwhelming naval power had been the key to victory. In their view the Japanese had already been brought to their knees through the efficacy of naval blockade and assault and the atomic weapons used on Japan had only given the Japanese an honorable excuse to surrender. It was clear that atomic weapons would be an important new weapon in the arsenal but they saw no reason to believe that these weapons would be so decisive as to obviate the need for a strong Navy with a well-developed power projection capability. These naval leaders assumed that the Navy would continue to play an important role in the security of the United States in

accordance with the theories of seapower espoused by Alfred T. Mahan. To them the procurement of a flush deck carrier was a natural evolution of capital ship design. The naval lessons learned during the war conclusively pointed to the need for larger carriers capable of carrying larger and more powerful aircraft. Accordingly, these same leaders saw the national infatuation with strategic bombing as the ultimate guarantor of Pax Americana as a dangerous illusion. The force procurement decisions that were being made to the detriment of their perceived needs in naval force structure were fundamentally risking to undermine the Navy's ability to carry out its critical role in protecting the national security.

One of the most fundamental aspects of American national security management is the unquestioning willingness of all participants to resolve differences within the context of a mutually agreed-upon set of constraints. Although the subordination of the military to civilian control is usually taken for granted in the United States, it should be remembered that unquestioning allegiance to the principles of rule of law and government on the authority of the Constitution is an exception rather than the rule in the history of nations. It is a testament to the strong convictions held by the uniformed leaders of the Navy that the national leadership was making a fundamentally incorrect decision on how to provide for the nation's security that

they were willing to engage in bureaucratic maneuvering to get around the Secretary of the Navy and the Secretary of Defense in order to get their concerns expressed to the Congress. In appealing to Congress, these leaders demonstrated another fundamental constraint on U.S. strategic planning--the need to muster and sustain popular support for the strategies chosen. Another constraint which was imposed by President Truman and tended to intensify the stakes in this controversy was the requirement to live within the confines of what the government could afford to pay for. In the years since this debate took place the executive and legislative branches have learned the fine art of choosing not to choose in making procurement decisions that have strategic implications. Instead of making choices, it has become standard to fund all programs, perhaps not at levels that are strategically or economically logical, but well enough to keep everyone's rice bowl at least half filled and avoid political risk.

IV. ANALYSIS

In order to understand how this debate established the framework for all subsequent debates on national strategy in the United States it is necessary to give an abbreviated chronology of how those officers in the Navy that were concerned about the direction the national strategy was going got their views expressed before Congress without the

support of the civilian leadership to which they were subordinate.

In May of 1949, a couple of months after Secretary Johnson had cancelled the procurement of the USS United States, Cedric Worth, a Special Assistant to Deputy Secretary of the Navy Dan Kimball, began gathering materials concerning rumors that were brought to his attention about the Air Force's B-36 program with the help of some of the naval officers serving in the Pentagon. Worth apparently also received assistance in this effort from Glenn Martin, a Baltimore aircraft contractor whose own Air Force tactical aircraft contracts had suffered as a result of a shift of Air Force funding to the B-36 bomber which was manufactured by Consolidated Vultee. The materials that Worth had gathered about the B-36 eventually were brought to the attention of several Congressmen including Representative James Van Zandt, a Republican member of the House Armed Services Committee. The documents charged that the Air Force had exaggerated the capabilities of the B-36 and leveled and that the fact that the B-36 was incapable of performing its strategic bombing mission was being covered up by the Air Force because the Secretary of the Air Force and the Secretary of Defense owned stock in the Consolidated Vultee company.

When Congressman Van Zandt was unable to convince Carl Vinson, the Chairman of the House Armed Services Committee,

to open hearings on the charges against the B-36, he tried to convince House Speaker Sam Rayburn to appoint an independent committee to investigate the charges. Congressman Vinson, a supporter of the B-36, realized that he would be unable to prevent hearings on the B-36 and that it would be better if his own committee conducted the hearings. In early June of 1949 the House Armed Services Committee reached agreement to conduct hearings on the charges brought against the B-36. However, in defining the scope of their hearings the Committee approved an agenda that considerably broadened the objectives of the hearings. In addition to establishing the veracity of the charges about the B-36 program and seeking to find out the source of the charges, the committee decided to investigate: a) the roles and missions of the Air Force and Navy, b) whether or not the decision to cancel the USS United States was sound, c) whether or not the Air Force was concentrating too much on the strategic bombing mission to the detriment of its tactical support mission, d) the procedures used by the JCS in making weapons procurement recommendations, e) the effectiveness of strategic bombing and whether it was a sound strategy for the nation to follow, and finally f) any other matters developed in the investigation which were considered pertinent. With such a broad charter the stage was set for the Navy to present its case.

The scope of the hearings was decided in early June and the hearings were scheduled to open in early August of 1949. In the ensuing two months the Air Force and Navy made preparations to present testimony to the committee. The Air Force made careful preparations for the hearings. W. Barton Leach, a Harvard law professor and Colonel in the Air Force Reserve, was appointed the "Coordinator-Director" of the Air Force's preparation for the hearings. Mr. Leach and his staff examined the charges which were being investigated and prepared a comprehensive response to all of them. When Joseph Keenan and James Gillin, who had been appointed as the senior investigators for the Armed Services Committee, came to the Pentagon to establish an office to work out of, the Air Force gave them an office right across the hall from Mr. Leach and his staff. Mr. Leach worked in close cooperation with the congressional investigators and by the time the hearings were convened in early August, had convinced them that all of the charges against the B-36 program or the process by which its procurement had been decided, were groundless. The Air Force carefully tended to their public image by using the months before the election to play down their differences with the Navy.

In the Navy the preparations for the hearings fell to Capt. Arleigh Burke who was the head of OP-23, the Organizational Policy and Research Division of the CNO's staff. The OP-23 staff had other responsibilities in addition to their

role in preparing for the hearings. Because the concerns of professional naval officers about the subjects to be covered in the hearings were not shared by the Secretary of the Navy and because the CNO, Admiral Denfield, was perceived by other naval officers as supporting the Secretary against the interests of the Navy, Arleigh Burke and his staff were given little encouragement in making preparations for the hearings. As a consequence, it is not surprising that the Navy's preparation for the hearings was less than the Air Force's preparations.

When the hearings opened in August of 1949 the Air Force's careful preparation paid off. The committee was impressed with the Air Force defense of the B-36 and the procurement process and found no reason to pursue the charges made against the B-36 further. The committee postponed further hearings on the questions about unification of the armed services and what strategy the country should adopt until October.

At the conclusion of the first part of the hearings in August, Cedric Worth had disclosed to the committee that his office had been responsible for gathering the material on which the charges the committee was investigating were based. When the Air Force was successful in refuting the specific charges against the B-36 in the first part of the hearings, the Navy opened its own investigation into Worth's preparations of the materials that had led to the hearings.

This investigation, which took the form of a court of inquiry headed by Adm. Thomas Kinkaid, eventually concluded that Worth had acted on his own in preparing the documents against the B-36 and providing them to members of Congress.

One of the naval officers that Adm. Kinkaid's court of inquiry had scheduled to testify was Capt. John Crommelin. Capt. Crommelin, a naval aviator with a distinguished war record, was working on the staff of the JCS at this time. In preparation for his testimony before the Kinkaid court of inquiry, Capt. Crommelin had prepared a statement which denounced the unification of the armed services as a mistake. When the court of inquiry was recessed before he got a chance to testify, Capt. Crommelin felt so strongly that his views should be heard that he called a press conference and read his prepared statement to the press.

The Secretary of the Navy, John Matthews, was extremely upset that a Navy Captain would issue statements to the press outside of official channels. But because a large number of other officers in the Navy felt that Capt. Crommelin was right and considered him something of a hero for expressing their views in public, Secretary Matthews found himself politically unable to take any punitive action against Capt. Crommelin. In an attempt to prevent further public airing of Navy grievances in the press without authorization, Secretary Matthews issued a directive to all Navy officers that their expressions of concern about policy

matters would be more appropriate and effective if they were made through official channels.

At about the same time that the events above were unfolding in Washington, Deputy Secretary of the Navy Kimball, addressing a conference of Pacific Fleet officers in Monterey, California, encouraged his audience to express their concerns through official channels about recent decisions by the Secretary of Defense to make further cuts in the defense budget which would have a major impact on the Navy. Vice Admiral Gerald Bogan, Commander of the First Task Force of the Pacific Fleet, decided to take Secretary Kimball's advise and express the concerns that he knew were shared by many of his fellow officers. Vice Admiral Bogan wrote a letter to the Secretary of the Navy via the Commander of the Pacific Fleet and the CNO. In his letter Admiral Bogan expressed support for the views which Captain Crommelin had expressed in public and noted that the Secretary was trying to keep similar views against unification, held by many naval officers, within official channels in the belief that they were mistaken and should not publicly question a policy which had already become law. Admiral Bogan went on to state that he believed that morale within the Navy was at its lowest point since he had been commissioned and that the perceived preference for strategic bombing to the exclusion of building the forces necessary for the requirements of the Navy was leading many junior officers to

question whether there was even any future in making the Navy a career.

Admiral Arthur Radford, the Commander of the Pacific Fleet, and the CNO both gave Admiral Bogan's letter a neutral endorsement before sending it on, noting only that Admiral Bogan was a respected officer and that they believed that his views were widely held by other officers in the Navy. When Bogan's letter reached Washington, Captain Crommelin managed to get a copy of it and released it to the press, much to the chagrin of Secretary Matthews.

When the Bogan letter became public, Carl Vinson, who had been attempting to cancel any further hearings by the Armed Services committee, recognized that the Navy's concerns would have to be given a full airing at the second part of the hearings. Secretary Matthews attempted to persuade Congressman Vinson to postpone further hearings until January of 1950. Admiral Radford, representing the views of the Navy officer corps, persuaded Vinson to proceed immediately with the hearing in order to perhaps undo some of the damage to the Navy Budget that Secretary Johnson's cuts would have in reducing further the Navy's force structure.

The second part of the Armed Service Committee hearings opened on the 6th of October 1949. This part of the hearings have since become known to history as the hearings on "Unification and Strategy." The first week of these

hearings was taken up by witnesses for the Navy's point of view. In all the Navy presented 23 witnesses. The Navy's testimony is notable for the diversity of directions in which it proceeded.

The first witness to be called was Secretary Matthews. He opened his testimony with a prepared statement denouncing the officers of his own service for their public display of dissension from policies that had been enacted into law by Congress. The low regard held for Secretary Matthews as the leader of the Navy by his own officers was demonstrated during the hearings when Secretary Matthews, responding to a question about the ability of naval officers dissenting views to be given a fair hearing through official channels, stated that he saw no reason for any officer to doubt that his views would be considered. The Naval officers in the audience laughed out loud at this remark.

Following the Secretary of the Navy, the remaining witnesses to testify in favor of the Navy's position were all, with one exception, either active duty or retired Naval officers. The list of Navy witnesses reads like a who's who of the past, present, and future Navy of the time. The first officer to testify was Admiral Radford, Commander of the Pacific Fleet. He criticized the B-36 as a bad gamble for the country, expressed his concern that nuclear deterrence would not prevent war and might start a war, and promoted the flush-deck designed USS United States as the

prototype of a new generation of carriers. Following Admiral Radford's testimony, a series of 10 "technical" witnesses testified on various difficulties associated with high altitude strategic bombing. These "experts" testified to the difficulty of accurately hitting targets from high altitude, the ease which fighter aircraft would have in intercepting the bombers, and the technical difficulties of radar bombing at night. One of these witnesses, Commander Eugene Tatom, an aviation ordnance specialist, went so far as to denigrate the efficacy of atomic bombing by stating that a man standing at one end of the main runway of Washington's National Airport and unshielded except for his own clothing, would escape serious injury from an atomic bomb detonated at the other end of the runway. Admiral Blandy, Commander of the Atlantic Fleet, followed the technical witnesses. Since Adm. Blandy's experience was in battleships, is testimony was seen as a refutation of the Secretary of the Navy's assertion that it was only naval aviators who were dissatisfied with the direction the nation's military strategy was heading. Adm. Blandy was one of the few Navy witnesses to speak of the positive aspects of naval power such as its flexibility rather than concentrating on attacking the B-36.

The remainder of the Navy's witnesses continued the attack on the B-36 and strategic bombing in general from every possible aspect. The testimony included the arguments

that strategic bombing was irrelevant to the defense of Europe, that it was too expensive, that the Navy had too few ships operational now to adequately carry out its mission, and the suggestion to build both the B-36 and the USS United States.

The last Naval officer to testify was the CNO, Admiral Denfield. During the week between the Secretary of the Navy's and the time the CNO gave his testimony, Secre-tary Matthews had tried to find out what the CNO planned to say during his testimony. However, the CNO had put him off by saying that he had not yet prepared his remarks. When the CNO did testify, he came out strongly for the arguments which his fellow officers had made. His testimony made Admiral Denfield a hero to his fellow officers and cost him his job when the Secretary of the Navy persuaded President Truman to replace him shortly after the hearings were concluded.

To present the Air Force's views that relied on only two witnesses--the Secretary of the Air Force, Stuart Symington, and the Chief of Staff of the Air Force, General Hoyt Vandenberg. The Secretary of the Air Force pointed out certain misrepresentations of fact in the testimony of some of the Navy witnesses, cited evidence to show that the Air Force was not relying unduly on the B-36 to the exclusion of other programs, and stated that the Air Force did not believe that wars could be won with strategic bombing alone.

The Chief of Staff of the Air Force reinforced his Secretary's testimony and repeated some of the points the Air Force had made in the testimony about the B-36 which had occurred during the first part of the hearings in August.

The hearings continued for several more days and included testimony by several more important military figures including General Omar Bradley who was the Chairman of the JCS and who denounced the Navy witnesses as a bunch of "fancy dans" who were unwilling to be team players. However, the central drama of the hearings was the dispute between the Navy and the Air Force.

After the conclusion of the testimony the Army Services Committee eventually printed its report in March of 1950 which unanimously reported 32 of the 33 conclusions reached by the committee. The one conclusion which was not agreed upon was that Admiral Denfield had been relieved because of his testimony. The other conclusions of the committee were notable only for their moderation. The committee did not recommend that the USS United States be restored to the budget and in fact nothing that came from the hearings was of any substantive benefit to addressing the concerns of the naval officers who had testified. But while the hearings did not change the Navy's fortunes in the Washington budget battle, the Korean War, which broke out in June of 1950, soon demonstrated that strategic bombing with nuclear weapons was not the answer to every military problem and

that there were still compelling reasons to maintain a strong Navy with powerful carrier battle groups as its principle means of power projection.

Looking back with the historical perspective of 40 years since the B-36/USS United States took place, the whole affairs has the appearance of a tempest in a teapot. However, to the naval officers of the time they were fighting to convince the nation not to abandon the importance of a strong Navy for what they saw as the illusory promise of a total reliance on nuclear deterrence with strategic bombers. If in hindsight their concerns for the future of the Navy and the nation seem overly dramatic, their assumptions about the continued importance of naval power and their criticism of a national strategy that planned to rely exclusively on nuclear deterrence were right on the mark.

In retrospect, the means this group of navy partisans employed to get their views heard by Congress might seem shady and disloyal to their leadership. But given the fact that they were gravely concerned about the future of the nation and the fact that the civilian leaders over them were seen as part of the problem and not part of the solution, what were they to do? Today Washington has come to accept the strategic news leak and the passing of unauthorized information from one part of the government to another as basic tools in the bureaucratic infighters kit bag. If the Navy's testimony in the hearings seems disorganized and

diffuse to the point of being ineffective, is it surprising? After all, these naval leaders had risen to their positions not as bureaucratic infighters but as operational commanders in wartime. That these same commanders who had lead the Navy to victory were unable to lead a successful bureaucratic campaign is evidence that the same leadership talents the nation's military needs in war are not necessarily the talents it needs in times of peace. The fact that the various positions taken by witnesses for the Navy in the hearings ran off in every direction and seemed to lack any clear sense of purpose can be attributed to the fact that the Secretary of the Navy was unsympathetic to the concerns of his officers and the CNO did not clearly see that his loyalties should be to his officers rather than to the Secretary until the hearings were already in progress.

The B-36/USS United States controversy was in many ways a prototype for the way debates on national strategy have been carried out in their country ever since. Legions of Washington insiders have come to understand that if a particular strategy is to be put forward its success or failure depends on whether the appropriate procurement battles in the budget cycle can be won. Like a number of similar strategy debates that have followed it, the ultimate arbiter of the outcome of the debate was not the eloquence of the arguments put forward or the subtle use of bureaucratic maneuvering to win advantage in the Washington arena

but rather the unfolding of events on the international scene which settled the dispute.

V. ANNOTATED BIBLIOGRAPHY

1. For a comprehensive survey of the events surrounding the B-36/USS United States controversy, see Paul Hammond's "Super Carriers and B-36 Bombers: Appropriations, Strategy and Politics," published in Harold Stein's American Civil-Military Decisions: A Book of Case Studies, a Twentieth Century Fund study published by the University of Alabama Press in 1963.

2. A more abbreviated relating the same events told from the Air Force perspective is contained in Herman S. Wolk's "Revolt of the Admiral," published in Air Force Magazine in the May 1988 issue beginning on page 52.

NAVY LONG-RANGE PLANNING: THE EXTENDED AND STRATEGIC VIEW

LT James A. Pelkofski

I. BACKGROUND

The original long-range planning office for the U.S. Navy was the General Board, active from 1900-1951. The General Board served as an advisory body to the Secretary of the Navy (SecNav), dealing with force level and strategic issues about a decade into the future. [Ref. 1:p. 62]

The Board's period of greatest influence was prior to World War I when it participated with the Army in the formulation of war plans. However, in 1915 the General Board lost its war planning responsibilities to the Office of the Chief of Naval Operations (CNO) and in 1932 the Board was reduced quantitatively and qualitatively in membership. Finally, after a reorganization and split in Navy planning responsibilities in 1945, the General Board lost its once powerful influence. [Ref. 2:pp. A-1--A-4]

The convening of the Ad Hoc Committee to Study Long Range Shipbuilding Plans and Programs was an attempt in 1954 to revive long-range Navy planning and it led to the formation of the Long Range Objectives Group (OP-93) and the Naval Warfare Analysis Group in 1955 [Ref. 3:pp. 53-54]. OP-93 worked for the CNO, advising him on issues such as

naval missions and requirements 10-15 years into the future [Ref. 1:p. 63].

The major output of OP-93 was its annual statement on Long Range Objectives (LRO), a planning and guidance document, widely circulated to subordinate levels to facilitate and direct overall long-range Navy planning [Ref. 2:pp. A-9 --A-11]. Furthermore, part of OP-93 was the innovative Institute of Naval Studies, formed in 1961 and incorporating the Naval Long Range Studies Project of the Naval War College. [Ref. 2:p. A-12]

With the advent of the Planning, Programming, and Budgeting System (PPBS), OP-93 began to lose its influence. In 1963, OP-93 was essentially demoted, removed from the office of the CNO and placed under Navy Program Planning (OP-090--now known as OP-08)[Ref. 2:p. A-12].

In 1964, the LRO became the MRO (Medium Range Objectives), a document that was far more fiscally influenced and less strategically conceptual than its predecessor. By the mid-1960s, the MRO had been displaced by the Navy Strategic Study (NSS), a policy document developed by the Deputy CNO for Plans and Policy (OP-06) specifically for use within PPBS. [Ref. 2:p. A-14] Moreover, in 1966 the Systems Analysis Division (OP-96) took over Navy long-range planning duties and by 1970 the Long Range Objectives Group was disestablished.

Thus, from the early 1960s and into the late 1970s, PPBS and systems analysis, limited to a 5-10 year horizon, dominated Navy planning. [Ref. 2:pp. A-14--A-15] Functional, rather than conceptual planning, was dominant and was characterized by a lack of integration and centralization at the CNO and SecNav levels [Ref. 2:p. A-19].

II. DESCRIPTION OF THE SYSTEM

Presently, Navy long-range planning is mainly the product of two systems: extended planning and strategic planning. The former is a function of short-term trend analysis and linear extrapolation; the latter is a non-linear approach that attempts to identify and influence discontinuities in the long term future. [Ref. 4:pp. 2-3]

The extended planning system is characterized by PPBS. Ideally, the system is initiated by the CNO's Program Advisory Memorandum (CPAM), a broad maritime strategy that highlights key considerations for forces necessary to execute the promulgated strategy [Ref. 5:p. 26]. The system incorporates the CPAM and guidance from SecNav into the Program Planning and Development Phases, designed to match resources to programs to fulfill the top-level guidance [Ref. 5:p. 23].

Paralleling and supplementing programming is the development of Warfare Mission Area Appraisals by the Director of Naval Warfare (OP-07). These appraisals are

studies of tends in warfare capabilities 5, 10, and sometimes 20 years into the future. They provide a warfare-oriented link between the CNO's maritime strategy and the POM (Program Objective Memorandum), the output of the Navy's extended planning system. [Ref. 5:pp. 31-32]

A critical portion of the Warfare Mission Area Appraisals is Warfare Area Planning. The maritime strategy is divided into mission areas from which mission area strategies are developed and incorporated into a Master Plan [Ref. 5:p. 33]. Ideally, master planning is guided by the Joint Long-Range Strategic Appraisal (JLRSA) to identify alternative futures [Ref. 4:Enclosure (1)]. The Master Plan is a comprehensive plan in a warfare mission area that is "fiscally and technically executable." [Ref. 5:p. 35]

Long-range planners within the various warfare areas, such as OP-02 (subsurface), OP-03 (surface), and OP-05 (air), contribute to the development of the Master Plans, as do the planners within OP-06 (Plans, Policy, Strategy, and Operations) [Ref. 6].

At the end of the process, OP-08 integrates and balances inputs with any additional CNO/SecNav guidance and finalizes the POM [Ref. 5:p. 24]. Thus, ideally, the maritime strategy guides the development of programs and Master Plans which are integrated into the POM, a list of Navy requirements for the next five years [Ref. 5:p. 21]. The POM has been described as "each Service's most concrete statement of

a Long Range Plan." [Ref. 5:p. 21] Finally, the POMs are aggregated into an overall Five Year Defense Plan (FYDP) for the Department of Defense (DOD) [Ref. 5:p. 17].

Also incorporated into navy extended planning is the Navy Long-Range MPT (Manpower, Personnel and Training) Strategy, Mid-Range Change in the POMs and FYDP, and the Extended Planning Annex (EPA0--a 15 year linear extension of the POM [Ref. 4:pp. 1-2].

Strategic planning in the Navy supplements PPBS and is predominantly an amalgam of several groups. Foremost is OP-00K, the Navy Long Range Planning Group, working for the CNO within the CNO Executive Panel (CEP) [Ref. 6]. OP-00K's stated mission is "[t]o advise the CNO on a wide range of scientific, political-military and strategic matters; to examine long-range Navy planning issues; and to serve as the link between the CNO and the CEP." [Ref. 7]

OP-00K is largely policy oriented and operates as an informal long-range strategic body for the CNO [Ref. 6]. Two important annual planning outputs of OP-00K are its Long-Range Planner's Conference, designed "to address long-range planning issues of importance to senior level officers involved in the Navy's long-range planning process" [Ref. 7] and the Long Range Assessment--a 20 year planning projection guided by the JLRSA [Ref. 6].

Related to OP-00K is the Strategic Studies Group (SSG), located at the Naval War College. The SSG supplements the

work of OP-00K and conducts CNO projects in both long and short term strategic thinking. [Ref. 8]

Finally, another group that is involved with strategic planning is OP-603 (Strategic Concepts Group), within OP-60. This group deals primarily in maritime strategy concepts and conducts forecasts out to a 10-20 year horizon. [Ref. 9]

III. KEY ASSUMPTIONS/CONSTRAINTS

Several key assumptions and common constraints may be identified in the process and development of Navy long-range planning.

The first assumption made by those conducting Navy long-range planning is that a navy is essential to the preservation of U.S. interests and national security [Ref. 10:p. 5]. Debate occurs over the degree that the Navy is essential; for example, planners may disagree over the effect the Navy might have in the outcome of a land war in Europe. However, consensus is reached over the general necessity of a navy in the U.S. national interest.

A related planning assumption is that a fundamental and significant shift has occurred in the maritime balance between the U.S. and the USSR, the primary threat [Ref. 11:p. 1]. Therefore, naval forces and strategies must be planned to contain, deter, and defeat, if necessary, a Soviet Navy whose capabilities are growing [Ref. 10:pp. 3,7].

Furthermore, the Soviet naval challenge is also a constraint to U.S. planning as, under a greater threat, American forces may suffer a relative degradation in capabilities and influence. Thus, planners recognize that the Navy is limited in its capabilities and long-range planning must make choices for how best to utilize these constrained capabilities [Ref. 11:p. 9].

Another assumption made by Navy long-range planners is the uncertainty inherent to their task. All planning involves varying degrees of uncertainty and thus planning must hedge accordingly [Ref. 4:p. 2]. Specific uncertainties include the changing nature of the threat, rising costs and decreasing funds, new technologies, and, because of the versatility of Navy platforms, emergent roles and employment of naval forces [Ref. 2:p. A-1]. Moreover, planners are currently dealing with blurred U.S. interests resulting from an increasingly interdependent, multipolar world [Ref. 10:p. 5]. The uncertainties weigh on the ability of the planners to optimize resources toward attainment of objectives; therefore, uncertainty may also be viewed as a constraint.

Planners also make assumptions over the methodology used to determine force procurement for the future. For example, some planners base their assumptions on a scenario, such as the Maritime Strategy [Ref. 5:p. 23]; others prefer to plan in terms of capability output, similar to that modeled in The Navy Strategic Planning Experiment [Ref. 2:p. 16].

Methodologies are not necessarily either/or and planners are likely to overlap their methods. Assumptions common to either methodology (as well as others that might be employed by navy planners) include recognition of the flexibility of naval forces; the need for significant numbers of ships, submarines, and aircraft; and the requirement for force projection capability [Ref. 10:pp. 8-11].

Two primary constraints upon Navy long-range planning involve the budget and time. Budgetary constraints, and associated resource limitations, are exacerbated by the high and rising costs of Navy platforms and new technology [Ref. 1:p. 64]. As the budget grows tighter, the range of options for planners dwindles, yet choices are made more difficult. Furthermore, inter-service battles become more polemic, thus increasing the difficulty of successful adjustment to fiscal constraints [Ref. 5:p. 24].

Time is predominantly a systemic constraint. Naval systems average at least ten years from initial planning to initial deployment, a fact that should not hinder long-range planning. However, force procurement occurs within the PPBS, a system geared more toward short-range planning; but planning naval forces is not conducive to the near-term. [Ref. 10:p. 1]

In addition, time, although seemingly favorable to naval forces given 20-40 year longevities [Ref. 10:p. 1], works as a disadvantage in an age where technologies race against

obsolescence and ultimately lose in record-breaking fashion. Thus, the advantages to long term planning and fiscal savings that might characterize Navy platforms must be weighed against the disadvantages of rapidly outmoded technologies [Ref. 2:p. A-1].

Finally, time is also a practical constraint for long-range planning. Coherent thinking for long-range planning requires unhindered time; however, planners are not often afforded the time to do such thinking [Ref. 3:p. 55].

IV. ANALYSIS

This section will analyze Navy long-range planning as it is conducted in the extended approach and the strategic approach. General observations will be discussed in the final analysis.

A. EXTENDED PLANNING

The extended planning method is a functional approach that involves low risk prediction for the short term and is budget oriented [Ref. 5:p. 15]. As discussed earlier, extended planning corresponds to PPBS.

Problems occur when the functional approach is equated with long-range planning and PPBS is confused with strategy [Ref. 11:p. 11]. PPBS and the POM system are successful in integrating "planning, technology, strategy, and resources into an executable program." [Ref. 5:p. 22] However, the

overall program seems to be the lowest acceptable output of an unwieldy system and not the product of purposeful and thoughtful long-range planning.

For example, POM development seems to be reactive, rather than proactive, and the tight schedule within which it evolves is likely to suppress, rather than encourage, innovation [Ref. 1:p. 62]. Although proponents of the POM system claim that it is scenario-driven [Ref. 5:p. 23], the broad scenarios may attempt to appease too many factions. Therefore, the process of making difficult planning choices that are necessary in a coherent but fiscally constrained planning process is complicated and degraded.

Guidance for POM development is initiated at the top levels of the Navy by the CNO and SecNav [Ref. 5:p. 17]. Furthermore, during POM development, the CNO Executive Panel, OP-08, and OP-90 (Program Development Review Committee) serve an oversight function [Ref. 5:p. 23]. However, feedback and involvement in the latter stages of the process by the high level initiators occurs too close to the end of the cycle when time is the severest constraint and thus the greatest influence, possibly precluding strategic and planning considerations, even if changes are necessary.

For example, as previously discussed, OP-08 integrates and balances programs in the POM. This would seem to be an opportunity for planning evaluation and adjustment, but by

this point in the PPBS cycle, time and budget, rather than strategy, may drive choices.

In addition, programming in PPBS often hinders long-range planning as individual programs become institutionalized within parochial bureaucracies capable of exploiting the short term, yet unending, PPBS cycle. Moreover, displacement of programs is difficult once entered into PPBS. [Ref. 1:p. 62]

Such ingrained programming fiscally stabilizes what might otherwise be an expensive system of programming by fits and starts. However, new initiatives are inevitably at a disadvantage and emergent strategic developments are slow to affect the programming process [Ref. 1:p. 62].

In-fighting between the parochial bureaucracies that emerge perpetuates program institutionalization and focuses debate on costs rather than planning and strategy [Ref. 12:p. 39]. Alliances loyal to their programs engage in fiscal in-fighting and not conceptual or strategic debate [Ref. 12:p. 39]. The result is that programs drive the budget instead of long-range planning driving programs and the budget [Ref. 11:p. 12].

The most effective and innovative long-range planning within PPBS occurs during Warfare Area Planning and the Master Plan development. Planning in these areas is dynamic, employing unconstrained and imaginative techniques such as wargaming, modeling, and expert judgment [Ref. 5:p.

33]. However, long-range planning in the warfare areas and Master Plans are operational in scope; strategic integration of the operational plans appears to be lacking.

In conclusion, the extended planning approach of PPBS is a largely decentralized process [Ref. 4:p. 2]. Initial centralized guidance seems to degenerate into decentralized disarray. Although long-range extended planning is done at different levels, divergent methodologies, objectives, and requirements result in a linear plan that is much less than the sum of its parts [Ref. 4:p. 2]. The synthesis of the numerous Master Plans and program documents is more an output of bureaucratic battles and compromises rather than strategic consensus [Ref. 11:p. 12]. It seems that integration is lacking, possibilities for mutual support are neglected, and RDT&D (research, development, testing, evaluation) fails to be maximized [Ref. 4:p. 2]. Hence, overall fiscal inefficiency seems to characterize a system ideally designed for planning budget maximization.

B. STRATEGIC PLANNING

The strategic planning method is a conceptual approach that involves high risk prediction for the long term [Ref. 7]. Effective strategic planning employs a top-down system in which high level conceptual planning groups such as the General Board, the Long Range Objectives Group, and OP-00K generate planning guidance, objectives, and requirements for subordinate planning levels [Ref. 13:p. 5].

Among the advantages of such conceptual planning groups are their relatively independent and unconstrained charter and their numerically practical size [Ref. 13:p. 5]. The 10-15 year planning horizon viewed by the General Board and OP-93 was reasonable for a long-range outlook; however, given the longevity of Navy platforms, it seems the planning horizon could be extended.

A system that engages in strategic planning is more apt to intuitively incorporate the most useful elements highlighted in The Navy Strategic Planning Experiment. Such elements would include the rational (but possibly neglected) requirement of initially defining objectives and goals and subsequently planning for their attainment [Ref. 11:pp. 3-4].

Perhaps most important, though, would be the inherent recognition, within conceptual planning groups, of the need to make choices, as detailed within the Strategic Planning Experiment. Although the study outlines a specific cell model,[1] the primary objective is the need to identify areas and missions of critical and secondary importance, to prioritize, and to plan in accordance with priorities [Ref. 11:pp. 9-11]. Thus, long-range planning would apply current and future assets in relation to essential and non-essential

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[1]See [Ref. 2:pp. 15-19] for a discussion of the cell concept.

needs, recognizing the practical limitations that require planners to make hard but necessary choices.

What emerges, ideally, is a limited but operable flexible response capability underpinned by a rational net assessment of the threat. Conceptual planning groups may be inherently apt at making the choices necessary to develop practical long-range plans, similar to the ideas presented in the Strategic Planning Experiment.

Similarly, conceptual planning groups may also plan more in terms of output services than in weapons systems [Ref. 11:p. 16]. In other words, strategic planning would engage in developing capabilities to fulfill a plan rather than adapting specific weapons systems to a plan. Thus, technology would be a planning asset rather than a strategic determinant, although the distinction is vague and emerging technological opportunities must be exploited. Technology, however, cannot be the driving force behind planning, and conceptual planning groups could possibly avoid such a proclivity.

Another related trap that could be avoided by strategic planning within conceptual planning groups is the bureaucratic in-fighting over programs and individual strategies [Ref. 12:pp. 36-38]. Members of such groups would not necessarily be immune to tacit or even explicit program and strategy alliances; however, group dynamics could limit such tendencies.

Much of what seems to affect extended planning within PPBS is short term action, characterized by crisis management [Ref. 3:p. 55]. Conceptual planning groups, by their long term vision and charter, could avoid the problem of crisis management, focusing primarily on the future.

By their nature, conceptual planning groups seem more adept at encouraging and developing innovative ideas to shape the future [Ref. 13:p. 5]. By contrast, extended, linear planning might neglect innovation that stretches past the short term. Strategic planning is designed to look past the short term, to develop ideas based on discontinuities, and to plan accordingly [Ref. 4:p. 3].

In conclusion, strategic planning within conceptual planning groups is capable of effective long-range planning. Moreover, effective long-range planning would make better use of PPBS by efficiently applying fiscal constraints to a thoughtful projection of the future [Ref. 11:p. 11].

C. FINAL ANALYSIS

In this section, general observations concerning national strategy, top-down management, naval force flexibility, historical initiatives, utilization of technology, and warfighting are discussed in relation to long-range planning in the Navy.

1. National Strategy

The POM has been described as the "Navy's corporate plan to implement its portion of national military policy

and strategy." [Ref. 5:p. 24] If each military service views its POM in a similar manner, then national strategy seems to be a synthesis of independently developed plans among competing services. In other words, there seems to be a political and military disconnect perpetrated by a lack of a cohesive national strategy.

Without national strategic guidance, efficient naval planning cannot occur [Ref. 11:p. 2]. Unless limits are defined for naval objectives, naval planners are forced to plan for too many contingencies with too few assets [Ref. 11:p. 2]. The current Maritime Strategy is a thoughtful attempt to adapt to an undefined national strategy [Ref. 14:p. 421] but it is understandably parochial and represents a bottom-up approach to planning.

Thus, national strategic guidance and subsequent joint, integrated military planning would improve long-range planning in each of the services. The present method of integration is a short-sighted and polemic "micro-review" of service POMs by OSD (Office of the Secretary of Defense), OMB (Office of Management and Budget), and Congress, from which emerges a policy that is, once again, the output of bureaucratic battles and compromises rather than planning [Ref. 13:p. 12].

2. Top-Down Management

In general, the current planning system in the Navy, as well as the DOD, is a bottom-up approach in which lower

levels are afforded excessive freedom and influence in determining long-range planning. This is not to degrade the importance of subordinate levels in long-range planning; rather, it is a criticism of the failure of top level officials to guide and direct long-range planning.

For example, proponents of PPBS claim that frequent marginal changes to the FYDP is not a bottom-up approach [Ref. 5:p. 23]. Although this may be true, it may also reflect the limits imposed on high level planners to effect only incremental changes to planning.

Thus, high level conceptual development should guide subordinate, functional planning from the top-down with frequent feedback and follow-up. What appears to occur is high level functional "tinkering" in a system over which the leadership has limited control [Ref. 1:p. 62].

3. Naval Force Flexibility

The nature of naval forces provides planners with what should be a favorable dilemma: how to utilize forces characterized by great flexibility. Such planning seems most appropriate for broad, conceptual planning, rather than functional planning that might be too constraining.

Related to the utility of conceptual planning for flexible forces is the method of planning in accordance with output services or capabilities rather than scenarios. Scenarios are certainly useful tools for planning but

excessive reliance can preclude considerations of other available options for employing naval forces.

The flexibility of naval forces requires a range of planning options in order to maximize use of these versatile forces [Ref. 10:p. 3]. Furthermore, the long platform life of many naval assets adds significant duration to their characteristic flexibility [Ref. 10:p. 1]. Thus, the requirement is even greater for effective long-range planning in the Navy, given force flexibility and durability.

4. Historical Initiatives

The history of long-range planning in the Navy has seen many excellent initiatives, such as the General Board, OP-93, and OP-00X (established in 1980; disestablished in 1983) [Ref. 15:p. 2], but little historical continuity. With the exception of the currently operating OP-00K (the successor to OP-00X), valuable long-range planning initiatives suffered from a limited life span. Therefore, the discontinuity characterized by recurring historical initiatives has precluded continuity in overall planning and analytic knowledge.

Some have observed that the lack of personnel continuity in the Navy precludes effective centralized long-range planning due to the drain of lost lessons learned [Ref. 15:p. 21]. Although some degree of 'corporate knowledge' is inevitably lost in the frequent shuffle of naval personnel

rotation, an enduring planning organization would minimize the knowledge drain occurring during personnel turnover. Certainly, much knowledge could be preserved in organizational archives. Moreover, an enduring planning organization could be more conducive to planning and analytical continuity, thereby enhancing the overall process of long-range planning. Presently, such continuity is lacking.

5. Utilization of Technology

It is questionable to what extent current long-range planning in the Navy maximizes the use of new technology. Apparently, the decentralized system of planning in the Navy fails to efficiently utilize advances in technology and neglects integrated and directed approaches toward technological research and development [Ref. 4:p. 2]. Certainly, without centralized and effective long-range planning, successful and economical exploitation of technology is unlikely.

6. Warfighting Emphasis

Finally, PPBS seems to neglect the fact that planning must ultimately prepare to fight and win wars, a point not always in evidence in a budget-conscious system. Warfighting should dominate Navy long-range planning on all levels. As discussed earlier, operational level planning is oriented to warfighting, but only at the operational level. There appears to be a strategic disconnect resulting from a lack of integration.

D. CONCLUSION

As noted in a Center for Naval Analysis research memorandum, "it would probably be difficult for any one office to be responsible for an overall Navy-wide comprehensive plan." [Ref. 15:p. 21] While this may be true, the Navy's present planning system, in its decentralized form, is not conducting effective long-range planning.

Rather, in the final analysis, planning in the Navy has adapted to PPBS, resulting in an extended, functional planning system that is not designed for the long range. Although conceptual long-range planning is conducted on various levels by different offices within the Navy, the decentralized nature of such planning reduces the potential benefits of strategic planning to ad hoc, sporadic successes. A process of centralized and integrated long-range planning in the Navy has not yet been realized.

V. ANNOTATED BIBLIOGRAPHY

1. Riggle, Gordon G., CDR., USN. "Looking to the Long Run." U.S. Naval Institute Proceedings 106 (September, 1980): 60-65.

The author conducts a succinct and critical overview of Navy long-range planning. Recommendations are suggested for better utilization of the Navy's Long Range Planning Group; however, these recommendations are somewhat limited and arguable. Nevertheless, problems with long-range planning

are succinctly identified, offering salient points for further consideration.

2. The Maritime Balance Study--The Navy Strategic Planning Experiment. Washington, D.C.: Office of the Chief of Naval Operations, 1979.

This study analyzes the applicability of corporate strategic planning to Navy long-range planning and endorses, not the adoption, but the adaptation of applicable aspects. The study is rational in its approach and offers salient advice on the need to develop definite objectives and to establish a strategy based on output services rendered, rather than on force composition. Its most important message is the need to prioritize and to plan accordingly, recognizing both capabilities to accomplish essential tasks and inabilities to achieve other tasks. Several appendices are attached, including an excellent history of long-range planning in the Navy.

3. Bruins, Berend D. "Should Naval Officers Be Strategists?" U.S. Naval Institute Proceedings 108 (January 1982): 52-56.

This article discusses strategic thought in the Navy, concluding that the Navy needs strategists and indicating that such strategists must come from within the service, not from civilian "think tanks." An overview of planning in the Navy is conducted and solid recommendations on long-range planning are offered. A major point in the article is that

time is needed for strategists to be trained and to apply their training.

4. Long-Range Planning OPNAV INSTRUCTION 5000, Washington, D.C.: Office of the Chief of Naval Operations, 24 March 1988.

This is a well-conceived, succinct document that identifies the discontinuities in Navy long-range planning and initiates measures to integrate and improve planning. The instruction concludes that coordinated and complementary efforts would enhance planning, thus would benefit the Navy overall. An enclosure outlines procedures to better guide the development of Master Plans.

5. U.S. Navy First Annual Long Range Planners' Conference. Annapolis, MD.: U.S. Naval Academy, 1985.

A review of the proceedings and selected articles from the Navy's first Long Range Planners' Conference. The article offers an overview of Navy planning and its place within the Department of Defense. Discussion includes new initiatives within the Department of the Navy toward planning innovation and technological integration. The role of the Maritime Strategy in long-range planning is favorably reviewed. Overall, this source is descriptive and offers little critical analysis.

6. Stavridis, James G., LCDR. of CNO Executive Panel (OP-00K). Telephone interview. 16 May 1988.

7. OP-00K CNO EXECUTIVE PANEL STAFF NAVY LONG RANGE PLANNER. Photocopied notes from slide program. Developed

by CNO Executive Panel (OP-00K), Alexandria, VA., 1988. 23 slides.

The slide program presents an overview of the mission and place of OP-00K and the CEP. In addition, long-range planning in the Navy and recent events and topics of planning interest are reviewed. Special thanks to LCDR James Stavridis for providing this source.

8. Brement, Marshal of the Strategic Studies Group, Naval War College. Telephone interview. 16 May 1988.

9. Simpson, Mike of the Strategic Concepts Group (OP-603). Telephone interview. 16 May 1988.

10. Sea Plan 2000 Naval Force Planning Study--Unclassified Executive Summary. Washington, D.C.: United States navy, 1978.

A sketchy summary of a much more detailed and comprehensive study on future naval force planning. The document outlines three national security objectives and justifies why a large and growing navy is necessary to achieve each objective. The overall conclusion is that more naval forces, based on their power, flexibility, and mobility, would enhance national security.

11. The Maritime Balance Study--The Navy Strategic Planning Experiment--Executive Summary. Washington, D.C.: Office of the Chief of Naval Operations, 1979.

A summary of the study discussed above that provides a sufficiently detailed description of the cell model and highlights conclusions from the document upon which it is based.

12. Davis, Vincent. The Politics of Innovative Patterns in Navy Cases. Denver, CO.: University of Denver, 1967.

This booklet discusses behavioral characteristics in large organizations, focusing on the Department of the Navy. Three case studies are reviewed (the development of a capability to deliver nuclear weapons from carrier-based aircraft, the development of nuclear propulsion units for ships, and the development of Fleet Ballistic Missiles) as are pre-WWII examples; the overall effort is to identify a pattern of behavior characteristic to the Navy. The conclusion on the prevalence of intra-service political battles is not surprising; the overall findings of the study are somewhat superficial and subjective.

13. A Report of the Defense Science Board Task Force on Strategic Planning and the Maritime Balance: An Experiment. Washington, D.C.: Office of the Under Secretary of Defense for Research and Engineering. November, 1979.

This report reviews the Defense Science Board's findings on the Strategic Planning Experiment. The report highlights and supplements discussion with pertinent recommendations for long-range planning in the Navy and for an integrated planning approach in the DOD. The report accurately points out the limits of a business approach to military strategic planning but highlights the relevant advantages of such an approach.

14. Friedman, Norman. "The Maritime Strategy and the Design of the U.S. Fleet." Comparative Strategy 6 (1987): 415-435.

The author argues for the analytic merits of the Maritime Strategy for force-planning and naval thinking. Although Friedman acknowledges the controversial issues revolving around the Maritime Strategy, the article favors the Maritime Strategy over systems analysis for force-planning. A major advantage of the Maritime Strategy, according to the author, is its basis of interactive analysis and its inherent flexibility.

15. George, James L., and others. Review of USN Long-Range Planning. Alexandria, VA.: Center for Naval Analysis, 1985.

This is a useful research memorandum that surveys the present and past aspects and offices involved in Navy long-range planning. In addition, a review of the various plans that make up the composite of Navy long-range planning is conducted in both the text and an appendix. Other appendices include a history of long-range planning in the Navy, excerpted from The Maritime Balance Study, and summaries of current Navy long-range planning and the influence of corporate planning methods. Although suggestions are offered to improve the Navy's approach to long-range planning, the study strongly implies the adequacy of the system in its present form.

SEA PLAN 2000
NAVAL FORCE PLANNING STUDY

LT John R. Hafey

I. BACKGROUND

Admiral Thomas Moorer, USN (Ret.) once noted that the cost of the Vietnam Conflict to the U.S. Navy was a generation of new ships. The financial burden of the war itself, coupled with that of the Great Society, shifted budgetary priorities away from force modernization programs. As a result, a number of naval ships were retired in the late 1960's and early 1970's without replacement. Naval end strength declined dramatically.

It is the relative decline in the size of the Navy that provides the proper context for examining naval force planning efforts during both the Carter and Reagan Administrations. Essentially, the Navy was attempting during this period to redress the imbalance wrought by Vietnam; to rebuild a Navy capable of attaining maritime superiority over any adversary for the remainder of the century.

The Navy has made significant gains to that end during the Ford Administration. Ford's last five year Shipbuilding Plan called for purchase of 157 ships at a cost of about $60 billion. After taking office in January 1977, President Carter initially supported the Ford plan. As work began in

earnest on the FY 1979 defense budget (Carter's first), however, the Administration's support began to waiver.

A draft Defense Guidance circulated in the fall of 1977 implied that a Navy of 450 ships with 10 carrier battle groups (CVBGs) would be adequate to fulfill projected strategic requirements. This was significantly below the Navy's estimate of 600 ships with 15 CVBGs. The Carter draft document was based upon a NATO-Warsaw Pact confrontation in Central Europe. According to the scenario, naval forces would engage only in defensive sea control operations. Moreover, the construct did not consider action on the flanks or in other theaters to be relevant to the force-sizing problem. Throughout most of the Carter Administration, the Office of the Secretary of Defense (OSD) would maintain that sizing forces from the Central Front scenario would produce a military capable of meeting all other contingencies.[1]

The Navy questioned the planning assumptions of the draft Guidance. Secretary of Defense Harold Brown directed that Navy Secretary W. Graham Claytor commission a study group to articulate the Navy's point of view. Thus, into this politically volatile atmosphere, Sea Plan 2000 was born.

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[1]Critics would contest this assumption. Some maintained that this scenario was used because it was readily adaptable to quantitative methods of policy analysis and that the systems analysts were dictating military strategy.

This essay examines Sea Plan 2000 from three different angles: from a systemic perspective; from the planner's perspective; and in terms of failure/success. It is the contention of this study that the naval force planning study known as Sea Plan 2000 was both a failure and a success. It was a short term failure in terms of the political environment of the late 1970's. Over the longer term, however, the plan was more successful. It provided the institutional rationale for a 600 ship Navy.

II. THE PLANNING SYSTEM

When Secretary Claytor commissioned the Sea Plan 2000 study, he went outside normal Navy planning channels. Sea Plan 2000 was an ad hoc, one-time planning committee. It was directed by Francis J. "Bing" West, then of the Naval War College's Center for Advanced Research. The panel consisted of ten naval and two Marine Corps officers between the ranks of O-4 to O-6 and four technical advisors. The group produced two large SECRET volumes and an UNCLASSIFIED executive summary (which does not do justice to the scope and breadth of the entire body).

The methodology used in the study can be described as follows: project a wide range of alternative situations that future naval forces might be involved in; determine what force levels and platforms are required to meet those situations; and back up the force level predictions with

extensive battle and campaign analyses. It should be noted that the projected situations were based on the past uses of naval forces and were not closely tied to any specific scenario. The plan sought to answer two generic questions: (1) what can policy-makers expect from naval forces (provides the linkage between national interests/objectives and naval missions/capabilities)?; and (2) how capable are our forces (corollary--what forces are required) to carry out these tasks through the year 2000?

Essentially, the study attempts to articulate the utility of naval forces to the policy-maker. An underlying assumption is that a decision-maker who is knowledgeable about the range of activities that naval forces perform in support of national policy will make more informed decisions on the future size and structure of the Navy. The following statement aptly summarizes the panel's force planning perspective:

> Given the past uses of naval forces and the uncertainty of the future environment, naval planning should focus upon capabilities, not scenarios, and upon a range of measures, not a dominant force-sizing criterion.

In order to determine what capabilities future forces should possess, the study contends, one must relate national security objectives to naval missions or tasks. Sea Plan 2000 accomplished this as follows. First, three key national security objectives were postulated. Next, a series of measures or tasks that naval forces perform in support of these objectives were outlined (i.e., what must

forces be capable of in order to secure this objective?). The objectives and the measures are depicted in Figure 1. Once this framework was established, the forces required to effectively execute the tasks could be recommended based upon extensive analytical capabilities studies.[2]

SECURITY OBJECTIVES AND NAVAL MEASURES

Maintain Stability

-- Forward Deployment
-- Naval Power Perceptions

Contain Crises

-- Capability to Affect Events Ashore
-- Superiority at Sea versus the Soviets

Deter Global War

-- Protect Sea Lines of Communications
-- Reinforce Allies
-- Put Military Pressure on Soviets
-- Hedge Against Uncertainty

Figure 1

In summary, Sea Plan 2000 adopted a four part planning system. First, it provided the policy-maker with a guide on how naval forces could be used. Next, it recommended force levels commensurate with task fulfillment. Third, the plan backed up these recommendations with numerical and battle

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[2]Volume 2 of Sea Plan 2000 contains the capabilities analyses.

analyses. Finally, the panel made recommendations on different budgetary options and the risks associated with each.

III. PLANNING OBJECTIVES/ASSUMPTIONS/CONSTRAINTS

A. OBJECTIVES

As a naval study, the obvious objective that guided Sea Plan 2000 personnel was to convince the policy-maker of the broad utility of naval forces. The study sought to influence the decision-making process in ways favorable to the Navy. A second objective was to take a hard look at the environment at sea through the year 2000 in order to determine how future forces might cope in a changing world.

B. ASSUMPTIONS

The Sea Plan 2000 group operated under a number of unwritten assumptions. These assumptions probably influenced the final report. First, Sea Plan 2000 was a naval force planning study. No attempt was made to determine if some other type of force might be more capable of fulfilling projected strategic requirements. It was assumed that naval units were best suited to a particular end.

Second, it was assumed that the mix of current naval forces (i.e., surface, subsurface and sea-based air) was basically correct. The study did not examine radical departures from the present force structure. Some were critical of Sea Plan 2000 for not departing more from the current

structure. However, it is probably not realistic to advocate a radically different force structure in the 20 year window that the group was concerned with.

A third assumption concerns the future international environment. The study projected an environment hostile to U.S. interests in most areas of the world. In fact, a large part of the rationale for procuring additional naval forces was based upon a hostile environment, with U.S. interests worldwide under attack. The kinds of forces required in a more benign world were not really considered.

Fourth, there were implicit assumptions made with respect to the kind of hostilities forces would encounter in the future. For example, there was almost no discussion of nuclear war at sea. In general, the study group broadly assumed that any future war would be both conventional and prolonged.

The final and perhaps most crucial assumption made by the Sea Plan 2000 group was that they would fulfill their charter--to plan a Navy for the year 2000. This is not a trivial matter. Many naval programs were in jeopardy during the fall of 1977 and spring of 1978. However, rather than addressing these short-term political issues, the group instead focuses upon the long-term future of the Navy. The net result is that the study might be called a short-term failure, but was much more successful over the longer term.

C. CONSTRAINTS

Two points are relevant with respect to constraints and the Sea Plan 2000 study. First, the proposed force structures were based upon reasonable budgetary assumptions. The panel proposed three planning options (see Figure 2): a high risk/low flexibility 440 ship fleet based on 1% real budget growth until 2000; a minimally capable fleet of 540 ships based on 3% real growth; and a highly versatile 600 ship fleet based on 4% real growth. Thus, the planners took fiscal constraints into account in their calculations.

PLANNING OPTIONS

TYPE	1%	3%	4%
CV	11	13	15
BB	0	0	0
AEGIS	10	24	28
CRU/DES	74	100	114
FF	136	152	158
SSN	80	94	98
SSBN	25	25	25
OTHER	139	172	194
TOTAL*	475/440	580/536	632/586

*1st number includes Naval Reserve and Sealift Ships
2nd number is active line strength

Figure 2

However, the nature of the Sea Plan 2000 charter meant that the planners were not encouraged to recommend priorities at the national level. Conversely, the panel specifically stated that it did not advocate establishing priorities among the projected naval missions. Therefore, on the one hand, planning options were severely constrained at the national level (only naval forces were considered). However, the planners operated in a relatively unconstrained environment at the naval level (did not have to make the hard choices with respect to naval mission priority).

IV. ANALYSIS

A. SHORT-TERM RESULTS

Sea Plan 2000 was publicly announced on 27 March 1978 by Navy Secretary Claytor. The site for the announcement was the Current Strategy Forum ongoing at the Naval War College. The public release of Sea Plan 2000 (specifically the unclassified Executive Summary) brought to a head the controversy that had been brewing between the Navy and OSD throughout the spring (see Annotated Bibliography for New York Times articles on the controversy). At issue was the future role of naval forces in national military strategy and thus the size and character of the Navy. Briefly, Defense Secretary Brown desired to relegate the Navy to a defensive sea control role, focusing procurement monies on

smaller, less capable ships rather than battle group forces. The Navy sought to maintain its traditional forward offensive role in strategy.

Three days prior to the release of Sea Plan 2000, the Carter Administration released their version of the Ford 5 Year Shipbuilding Plan.[3] Carter proposed to cut naval force procurement in half--from 157 ships at $60 billion to 70 ships at $32 billion. Defense Department officials implied that monies saved by the shipbuilding cuts could be used to upgrade Army and Air Force capabilities in Central Europe. Essentially, the situation that had led to the creation of the Sea Plan 2000 panel in the first place had become a political reality before the study was even released.

Sea Plan 2000 came to be seen as the Navy's formal response to the Carter Administration's defense strategy. It was viewed by many in and out of government as a bureaucratic counterattack to the Administration's shipbuilding cutbacks. The defense debate that resulted lasted for nearly a year thereafter. In some respects the Navy position was vindicated when Congress authorized construction of an additional NIMITZ-class nuclear carrier, overriding Carter's recommendation for a medium-sized version. Nonetheless, differences between the Navy and the Administration over strategy made Sea Plan 2000 a politically

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[3]The Carter Plan was released at 6 p.m. on Friday, 24 March 1978.

controversial study. Therefore, it became a less than optimum tool for arguing the Navy's position, at least in the short term.

B. LONG-TERM RESULTS

Over the longer-term, Sea Plan 2000 would become the cornerstone of the 600 ship Navy. By the early 1980's, the political situation had changed dramatically. The combination of the revolution in Iran and the Soviet invasion of Afghanistan highlighted the strategic requirement for forces optimized for roles that transcend the Central Front scenario. Moreover, the international environment was shaping up to be as hostile as the Navy study had predicted. Finally, the Administration had taken power on the platform of restoring American naval and military strength worldwide.

The Navy developed the Maritime Strategy to articulate its needs and guide its vision in this new environment. However, many of the assumptions and force level recommendations contained in the Maritime Strategy were almost certainly adapted from the work of the Sea Plan 2000 group. Over the longer-term, the study must be viewed as a qualified success.

C. CONCLUSIONS

The Sea Plan 2000 Naval Force Planning Study approached the planning problem in the way that navies prefer to look at the future: emphasizing capabilities over specific

scenarios; designing broadly flexible forces capable of a variety of actions; backing up recommendations with operations analysis. The study explains how naval forces support national security objectives across the conflict spectrum from peace to crisis to war. It is required reading for anyone with a desire to understand the utility of naval forces and how naval officers view the world.

The principal shortcoming of the study was its failure to adequately address the political context of the planning milieu. In some respects, the study was a victim of the circumstances at that time. However, as all procurement decisions are eventually political, the naval force planner must fully consider political issues in his deliberations. Sea Plan 2000 was a short-term failure, at least in part, because these issues were not adequately considered.

V. ANNOTATED BIBLIOGRAPHY

U.S. Navy. Sea Plan 2000: Naval Force Planning Study (UNCLASSIFIED Executive Summary). March 1978. A summary of the key findings of the classified study. Presents relationship between naval missions and national security objectives. Develops 3 planning options of 1%, 3% and 4% growth rates respectively. Advocates keeping the current balance of capabilities within the fleet the same.

West, Francis J. "Planning for the Navy's Future." USNI Proceedings. October 1979, pp. 26-33; and "A Fleet for the Year 2000." USNI Proceedings. May 1980, pp. 66-81. Essays by one of the authors of Sea Plan 2000. Summarizes the key findings of the study, especially with respect to naval missions and forces to accomplish them.

George, James L., Robert E. Sheridan, Francis J. West and Michael E. Sherman. Review of USN Long-Range Planning (CRM 85-69). Alexandria, Va.: Center for Naval Analyses, July 1985. Provides an overview of USN long-range planning in this century with emphasis on the period between 1978-1985. Places Sea Plan 2000 in context with other naval plans. See especially Francis J. West's essay, "Navy Long-Range Planning" in Appendix C.

Hessman, James D. "Sea Plan 2000." Sea Power. May 1978, pp. 26-28. An overview of the Executive Summary and synopsis of the debate between OSD and the navy.

Prina, L. Edgar. "Navy/DoD Differences Aired as FY '79 Defense Debate Continues." Sea Power. May 1978, pp. 29-32. More on the debate between the use of set-piece scenarios versus flexible capabilities as a guide to planning.

Woolsey, R. James. "Planning a Navy: The Risks of Conventional Wisdom." International Security. Summer 1978, pp. 17-29. An excellent article on the shortcomings of quantitative policy analysis, set-piece scenarios and conventional wisdom as a guide to planning. Does not specifically mention Sea Plan 2000 or the DoD Consolidated Guidance. However, the author makes clear his preference for the former.

"Professional Notes." USNI Proceedings. June 1978, pp. 121-126. A summary of the notable newspaper articles dealing with the release of Sea Plan 2000 and its subsequent reception in defense circles.

Etzold, Thomas H. "The Navy and National Security Planning in the 1970s." In Harry E. Borowski's Military Planning in the Twentieth Century. Washington: USAF Office of History, 1986. Author argues that Navy planning failures in the 1970s were a result of three factors: (1) divergent assumptions between the Navy and other national security decision-makers; (2) reliance on a theory of sea power that had become less effective than supposed; and (3) over-reliance on scenario-building to rationalize force procurements. This essay does not directly address Sea Plan 2000 but reasons #1 is relevant to the plan's ultimate fate.

New York Times. The debate about the Navy's future sparked by the release of DoD's Consolidated Guidance and Sea Plan 2000 was prominent on the pages of the New York Times. See the following articles to trace the controversy:

-- "The Battle of WhizKid Gulf." William Safire. 9 February 1978, p. 21.

-- "Brown Criticizes Navy Officers Who Oppose Changes in Strategy." Bernard Weintraub. 17 February 1978, IV, p. 11.

-- "Navy Sees It Must Shape Up To Go On Shipping Out." Bernard Weintraub. 19 February 1978, IV, p. 4.

-- "Navy Protests Limitations Of Its Long-Term Mission." 14 March 1978, p. 3.

-- "U.S. Defense Debate Arises Over Whether Focus On Europe Neglects Other Areas." Richard Burt. 24 March 1978, p. 3.

-- "Claytor Criticizes Pentagon Aides On Plans To Reduce Navy's Role." Bernard Weintraub. 28 March 1978, p. 3.

-- "Navy Is Warned On Priorities, Cost and Squabbles." Bernard Weintraub. 29 March 1978, p. 18.

-- "Dispute Over Navy Role Termed Biggest Defense Fight Since 1948." Bernard Weintraub. 4 April 1978, p. 16.

-- "Against Reducing America's Naval Strength." Gary Hart. 9 April 1978, IV, p. 19.

-- "Young Aide Shapes Defense Policy." Bernard Weintraub. 15 April 1978, p. 9.

-- "Brown Sees Naval Threat." Bernard Weintraub. 7 June 1978, p. 4.

-- "Soviet Fleet Gains Stirs U.S. Rethinking." Drew Middleton. 26 November 1978, p. 16.

THE MARITIME STRATEGY: A CASE STUDY IN STRATEGIC PLANNING

LT J.H. Fenter

I. WHAT IS THE MARITIME STRATEGY?

The Maritime Strategy is the United States Navy contribution to the National Military Strategy. It was developed as a baseline for a global conventional war against the Soviet Union, and is derived from the aims put forth in the NSDDs issued by the President. The inputs for development and changes in the Maritime Strategy are taken from the Secretary of Defense in the Defense Guidance, the Joint Strategic Planning Document and JSCAP, feedback and suggestions from the CINCs, and the alliances and treaties which are currently binding on the United States. The Maritime Strategy has as its objectives the following:

1. Deterrence of war with the Soviet Union.
2. Forward operations and escalation control in all areas in the event of war.
3. Termination of the war on terms which favor the United States and its allies. [Ref. 1]

The premise of the Maritime Strategy is that it will be a global, coalition, protracted non-nuclear conflict. From that premise, it draws the following concepts of readiness:

1. The United States Navy must operate with a forward posture in peacetime in order to be prepared for transition to war in the minimum time possible, to

protect our exposed allies, and to achieve maximum deterrent effect with such a posture.

2. A high state of readiness for combat must be maintained by the fleet in order to survive the initial Soviet assault and to transition to war as quickly and smoothly as possible.

3. The United States must maintain a lead in the development and use of defense advanced technology in order to offset Soviet numerical advantages and to nullify Soviet weapons systems as much as possible.

4. The Navy must retain flexibility within the strategy in order to adapt to tactical and technological changes imposed by progress or by new Soviet developments.

5. The Navy must maintain maximum mobility in order to meet Soviet thrusts anywhere in the world, to escalate horizontally in an area which will deter the Soviets, and to minimize the targets presented to Soviet forces. [Ref. 1]

Given the above, the Maritime Strategy coopts the Army and Air Force into itself by giving them specific missions in support of its operations in addition to their self-imposed missions in the Atlantic and Pacific theaters. The NATO and Pacific allies are also assigned roles in conducting the Maritime Strategy in specific maritime areas, thus reinforcing the idea of a global, coalition conflict in which all parties are interdependent.

The primary objective in developing the Maritime Strategy is to deter a war with the Soviet Union by forcing them to have a perception of such a war as unprofitable and highly risky. This can only be done by maintaining a position of strength and preparedness.

> The heart of our evolving Maritime Strategy is crisis response. If war with the Soviets ever comes, it will probably result from a crisis that escalates out of control. Our ability to contain and control crises is an important factor in our ability to prevent global conflict. [Ref. 1:p. 8]

II. THE HISTORY OF THE MARITIME STRATEGY

The Maritime Strategy was published in an unclassified form for public release in a Naval Institute Proceedings Supplement in January of 1986. But the development of the concepts behind it and assembly of the strategy in a clearly stated form began several years beforehand.

In the mid and late 1970's, following the Arab-Israeli 1973 war and the attendant U.S.-Soviet confrontation in the Mediterranean, the United States Navy (along with its sister services) perceived a growth in Soviet military capabilities which was not accompanied by a corresponding U.S. growth. This situation called into question the ability of the Navy to accomplish its goal of ensuring the resupply of Europe in the event of war. Senior officers of the Navy examined the problem and attempted to redefine the role of the Navy in future conflicts in light of the growing Soviet capabilities. In 1977, the result was the publishing of Sea Plan 2000 [Ref. 2], which expanded the Navy role to a global offensive with participation from maritime allies. The need for a 600 ship Navy in order to accomplish the goals of the new plan was included, although options for less investment

were also included in the study. These lesser options, stated in % growth of Navy funding, contained warnings of reduced capability, minimal deterrent effect and high risk of failure in the event of a war; they were basically an argument for the 600 ship fleet. Following the airing of Sea Plan 2000, there was extensive debate in professional journals about the merits and faults of the plan. In particular, the Naval Institute Proceedings published a series of articles on various geographic areas and the strategies to be used in each between May of 1979 and May of 1980. These articles were meant to discuss and flesh out areas of the plan. [Ref. 3]

Following the election of President Reagan in 1980, there was a hiatus in the discussion of military strategy as the new administration learned the "ropes" of dealing with the armed services. The new Secretary of Defense and Secretary of the Navy concentrated first on obtaining large budget increases for the services, and later on the strategies for those services. But in February of 1984, Navy Secretary Lehman published his "Nine Principles" in Proceedings, which can be summed up as follows:

- A coherent, realistic national strategy
- A strong national will
- The character of government institutions
- Superior military leadership
- Adequate military materiel strength

- Superior Allied naval forces
- Integration of specific geography and naval strategy
- Forward naval employment strategy
- Sealift capability. [Ref. 4]

The Secretary's points echoed the Seaplan premises, but emphasized more the requirement for a national strategy which was forward and maritime in nature, and which included in a more integral way the Allied navies and maritime capabilities (including merchant hulls). Additionally, there were no "less expensive" options offered; the premise was that the United States simply could not afford to risk losing the maritime battle.

The discussion continued, with comments on the direction of U.S. and NATO strategy being extensively covered in the Proceedings Sea Link supplement of 1984, and the "No Bastion for the Bear" series in 1984 and 1985. Meanwhile, under the direction of CNO's Hayward and Watkins, the Maritime Strategy was being gamed out extensively at the Naval War College by the Strategic Studies Group. [Ref. 5] By 1985, the existence of the Maritime Strategy was well-known; the classified version had been released and was being discussed in the professional journals at length. Following release in unclassified form in January of 1986, an invitation to debate the form and content of the strategy was extended to the naval community. Since then there has been ongoing

debate over several key points and accusations. Some of these issues are:

- The Maritime Strategy does not address nuclear war except in the concept of deterring it. It assumes the war at sea is non-nuclear.
- The Maritime Strategy was formulated and disseminated with little or no input from those who must play a critical role in executing it.
- The Maritime Strategy is a budget weapon for the Navy in order to justify new programs and spending (the 600 ship Navy).

The issues have not yet been resolved, and so it is difficult to assess the effects of the Maritime Strategy or the truthfulness of the arguments. But there are certain yardsticks by which to measure both.

III. MEASURING THE MARITIME STRATEGY

The Maritime Strategy can be looked at as being three different things; one, a warfighting strategy which will emphasize the offensive for the U.S. Navy and prey on the weaknesses of the Soviet military, while helping to control nuclear escalation; two, a declaratory strategy designed to elicit desired reactions from the Soviet Union and our maritime allies in order to improve the position of the United States (and the Navy) in some military or political way; and three, as a budget justification for the construction of aircraft carriers, attack submarines and advanced surface ships, and Navy personnel increases.

If the Maritime Strategy is to be used in warfighting, and is the basis for the CINC warplans should a war begin next week, then its effectiveness must be measured by the ability of the forces in being and in the near future to execute the strategy. Assuming that the deterrent aspect of the strategy has failed, can the United States fight successfully using this strategy? (There is only one sure way to find out, but that is not an option!) In order to conduct the initial operations in Soviet home waters (north of the GIUK gap and the Sea of Okhotsk), we must have a large SSN force, capable of operating unsupported, under ice and in the marginal ice zone, against a numerically superior Soviet SSN picket force. The Soviet force will be operating in familiar waters with extensive air and surface ASW support. Our SSNs must fulfill a triple role of: 1) keeping the enemy submarine forces and the supporting surface forces pinned back in the bastions and away from critical NATO and Pacific SLOCs, 2) hunting down and destroying Soviet SSBNs, SSGNs, and major surface targets, and 3) launching conventional TLAM strikes against theater targets to suppress Soviet Naval Aviation and PVO interceptor actions. The current 688 class submarines deployed in the fleet have limited under-ice capability, with no hardening of the sail and rudder, no vertical position for the fairwater planes, and less depth capability than the older 637 class submarines which do possess these features. However, the older

ships are slightly noisier and slower than the 688 class. The SSN-21 class currently under design should help rectify those weaknesses. The use of passive and active countermeasures to reduce Soviet sensor and weapons effectiveness has always been emphasized, with anechoic hull coatings being used to some extent on newer ships. However, the numerical and familiarity disadvantages of operating in the bastions, and the high probability of detection of a NATO sub following a weapon launch there, make the survivability of a U.S. SSN less than optimum.

Should the SSN force succeed in pinning the Soviets back in the bastions and suppressing (to some extent) the threat of land-based air strikes against battle groups, the next step of the strategy is to expand operations to the flanks of the battle, using carrier-based air power and sea launched cruise missiles to relieve pressure on the front lines and inserting Marine landing forces at critical areas while reinforcing Norway and Japan. Meanwhile, the surface Navy and supporting air and submarine assets would destroy the forward deployed Soviet Navy and Merchant Marine units, and clear Soviet minefields which interfere with SLOCs and fleet movement. The mine warfare problem is a sensitive one, with a dearth of minesweepers pointed out recently in the Persian Gulf crisis. The need for 15 carrier battle groups is based on conducting such operations simultaneously in all areas of the globe; the need to do so is a

possibility. At the moment, the U.S. Navy does not possess the forces needed to execute these missions simultaneously, unless the Allied navies are included in the balance. [Ref. 6]

If the Maritime Strategy is a declaratory strategy designed to elicit a response from the Soviet Union (and others), the most likely desired response would be a Soviet pullback from its aggressively expanding maritime deployments of the 1970's, when OKEAN 70 and 75 established the Soviet Navy as a global naval power. The Soviets have pulled back since the late 70's, restricting their exercises to the waters relatively near their shores and minimizing deployments to open ocean. The question then is, are they doing so because of the Maritime Strategy, or is there another reason? Some possible explanations are economic squeeze on the Soviet Navy, an acceptance of a subordinate role to the overall Soviet military (signaled by the retirement of ADM Gorshkov), and a consolidation of strength in areas where they feel that the U.S. Navy will be at a disadvantage. There is a possibility that the Maritime Strategy is not causing the Soviets to react, but vice versa.

The Maritime Strategy as a declaratory policy may also be a device by which the United States Navy is pressuring the Army, Air Force and allied countries to provide the support which it desires. If so, the results have been mixed, with some elements of the Army and Air Force

rejecting the strategy outright, and allies refusing to sign on since they were not adequately consulted prior to being assigned roles in the strategy.

The Maritime Strategy, if a device to increase the Navy budget and increase naval dominance of the U.S. defense picture, has had mixed success. On the one hand, the Navy has received the lion's share of the Pentagon budget throughout the Reagan Administration's tenure, and has carried on construction of Nimitz class carriers and Los Angeles class submarines at a good rate. On the other hand, the debate over the SSN-21 submarine has been stalled, the early retirement of Garcia class frigates, and the fight to fund the AEGIS program increases have all put the 600 ship Navy farther into the future, and the likely defense budget cuts in the future do not bode well for the Navy. All in all, however, the Navy should retain a better position vis-a-vis conventional war than the Army and Air Force despite budget cuts due to the constant use of navy forces in crisis response keeping the Navy in the public eye.

IV. CONCLUSIONS

The Maritime Strategy, as a case study in success or failure as a strategy, is a mixed bag. It is probably a combination of three different strategies with different success rates, depending on whose opinion one receives. The overall picture of the Maritime Strategy case is undergoing

revision constantly, and it will be a few years before it can be judged a true success or failure in any area. Since it is the only strategy the U.S. Navy has, it is the tool which must be used until something better comes along.

LIST OF REFERENCES

1. Watkins, J.D., "The Maritime Strategy," Naval Institute Proceedings, Special Supplement, pp. 7-14, January 1986.

2. West, F.J. Jr., "Maritime Strategy and NATO Deterrence," Naval War College Review, Vol. 38, No. 5/311, pp. 5-19, September-October 1985.

3. See May 1979 issue for LANT, PAC, June 1979 issue for EURAFRICA, May 1980 issue for NE ASIA/NORWESPAAC.

4. Lehman, J.F., "Nine Principles for the Future of American Maritime Power," Naval Institute Proceedings, Vol. 110/2/972, pp. 46-51, February 1984.

5. West, F.J. Jr., "Maritime Strategy and NATO Deterrence," Naval War College Review, Vol. 38, No. 5/311, pp. 5-19, September-October 1985.

6. Polmar, N., The Ships and Aircraft of the U.S. Fleet, 13th ed., pp. 80-101, Naval Institute Press, 1986.

BIBLIOGRAPHY

Ackley, R.T., "No Bastions for the Bear: Round 2," Naval Institute Proceedings, Vol. 111/4/986, April 1985.

Froggett, S.J., "The Maritime Strategy: Tomahawk's Role," Naval Institute Proceedings, Vol. 113/2/1008, February 1987.

Gray, C.S., "Maritime Strategy," Naval Institute Proceedings, Vol. 112/2/996, February 1986.

Heginbotham, S.J., "The Forward Maritime Strategy and Nordic Europe," Naval War College Review, Vol. 38, No. 6/213, November-December 1985.

Komer, R.W., Maritime Strategy or Coalition Defense?, Abt Books, 1984.

Lehman, J.F., "Nine Principles for the Future of American Maritime Power," Naval Institute Proceedings, Vol. 110/2/972, February 1984.

Mackay, S.V., "The Maritime Strategy: An Allied Reaction," Naval Institute Proceedings, Vol. 113/4/1010, April 1987.

O'Neil, W.D., "Executing the Maritime Strategy," Naval Institute Proceedings, Vol. 112/12/1006, December 1986.

Polmar, N., The Ships and Aircraft of the U.S. Fleet, 13th ed., Naval Institute Press, 1984.

Rivkin, D.B. Jr., "No Bastions for the Bear," Naval Institute Proceedings, Vol. 110/4/974, April 1984.

Till, G., and others, Maritime Strategy and the Nuclear Age, 2nd ed., St. Martin's Press, 1984.

Trost, C.A.H., "Looking Beyond the Maritime Strategy," Naval Institute Proceedings, Vol. 113/01/1007, January 1987.

U.S. Joint Chiefs of Staff, United States Military Posture FY 1988, Government Printing Office, Washington, D.C., 1987.

U.S. Naval Institute, Sea Link Supplement 1984, Naval Institute Press, 1984.

West, F.J. Jr., "The Maritime Strategy: The Next Step," Naval Institute Proceedings, Vol. 113/01/1007, January 1987.

Wood, R.S., and Hanley, J.T. Jr., "The Maritime Role in the North Atlantic," Naval War College Review, Vol. 38, No. 6/312, November-December 1985.

PART III

AIR FORCE LONG RANGE PLANNING

LT David Ricker

I. INTRODUCTION

Long range planning in the Air Force has developed over the years into a well-organized institutional process. Today's long range planning process begins at the top of the organization with the Secretary and Chief of Staff of the Air Force signing the Planning Guidance Memorandum and encompasses every echelon of the Air Force organization. Although today's planning system is directed from the top and well-integrated, Air Force long range planning has not always been centrally directed, diversified or enduring. Various titles and organizational structures have been used for the Air Force long range planning process but two recurring themes have been manifested in each phase of the planning evolution. Until the late 1970s long range planning was conducted by ad hoc planning staffs at various echelons in the Air Force organization. Unhappy with long range planning, Secretary of the Air Force John Stetson realized the need for an institutionalized process and consequently directed a study group to examine the feasibility of developing an institutionalized planning process that might possibly incorporate long range planning techniques

used by the business community, provide a 20 year forecast and recommend strategy alternatives. The planning process recommended by the study group was institute in 1978 and has survived until today. Although the planning system was new, many strategies, concepts and ideas concerning the mission of the Air Force and the purpose of air power that had existed prior to and throughout the history of the Air Force were incorporated in the new long range planning system. Today's long range planning is still influenced by two recurring themes that have helped to shape the "air strategy" for air power since the 1920s. [Ref. 1]

II. THE ORIGINS OF AIR STRATEGY

Although the United States Air Force was not officially organized as an independent branch of the armed services until 1947, U.S. long range planning for the use of air power has been taking place from the time aircraft were first introduced as an instrument of war. In order to realistically evaluate long range planning in the United States Air Force it is necessary to investigate the theories of some early air power strategists prior to the 1947 genesis of today's Air Force. Two early air power strategic thinkers have had the most impact on Air Force planning and the influence of their theories is still commonplace in long range planning today.

A. GIULIO DOUHET

Giulio Douhet, a general in the Italian Army who saw a significant change in warfare due to the airplane, began writing about the role of air power in future wars in the early 1900s. After World War I he wrote a comprehensive book titled "The Command of the Air" which explained his theory of air power in warfare. Central to Douhet's theory of air power was the significance of strategic bombing. Douhet's explanation of how the airplane had completely changed warfare was profound.

> The airplane has complete freedom of action and direction; it can fly to and from any point of the compass in the shortest time--in a straight line--by any route deemed expedient. All the influences which have conditioned and characterized warfare from the beginning are powerless to affect aerial action. By virtue of this new weapon, the repercussions of war are no linger limited by the farthest artillery range of surface guns, but can be directly felt for hundreds and hundreds of miles over all the lands and seas of nations at war. No longer can areas exist in which life can be lived in safety and tranquility, nor can the battlefield any longer be limited to actual combatants ....There will be no distinction any longer between soldiers and civilians. The defenses on land and sea will no longer serve to protect the country behind them; nor can victory on land or sea protect the people from enemy aerial attacks unless that victory insures the destruction, by actual occupation of the enemy's territory, of all that gives life to his aerial forces....By bombing railroad junctions and depots, population centers at road junctions, military depots, and other vital objectives, an Air Force could handicap the mobilization of an Army. By bombing naval bases, arsenals, oil stores, battleships at anchor, and mercantile ports, it could prevent the efficient operation of a navy. By bombing the most vital civilian centers it could spread terror through the nation and quickly break down a nation's material and moral resistance. A complete breakdown of the social structure cannot but take place in a country subjected to this kind of merciless pounding from the air. [Ref. 2]

As can be seen from the excerpt above, Douhet was convinced strategic bombing had altered the nature of war to such an extent that any nation without an air force capable of strategic bombing would be quickly defeated. To properly implement his theory of air power a critical restructuring of his nation's armed forces was needed to properly utilize air power.

In order to direct this revolution in warfare, an independent air force was needed. An air force subordinate to the army or navy would be diverted from the primary mission of strategic bombing by generals and admirals who would be concerned with their particular type of warfare and might fail to understand the significance of air power in future wars.

> As long as aerial forces remain mere auxiliaries of the army and navy, there will be no real aerial warfare in case of conflict. True, there will be air battles of major and minor proportions, but always subject to land or sea operations. Before any real aerial warfare can take place, its basic elements, such as planes, personnel, and their organization into an autonomous fighting body, must first be created and forged into an efficient fighting organization. [Ref. 2:p. 191]

B. BILLY MITCHELL

America's foremost crusader for air power was General William "Billy" Mitchell. A contemporary of Douhet, Mitchell was also a vocal proponent of the role of air power in future wars. Like Douhet, Mitchell was convinced of the need for an independent air force and the role air power would play in future wars. In his epic book Winged Defense,

Mitchell spelled out his theories concerning the role of air power and the revolution in warfare the aircraft had ushered into the 20th century. Although Douhet and Mitchell had many similar views concerning the future of air power, a significant difference existed concerning the role of pursuit, or fighter aircraft and ground support aircraft. Unlike Douhet, who believed strategic bombing was the key to air power, Mitchell proposed a role for all aircraft and included support for ground and naval forces. [Ref. 3] The controversy over the role of fighters continues among air power strategists today and has influenced Air Force planning as the top leadership cycles between bomber and fighter pilots.

C. AIR CORPS TACTICAL SCHOOL

The Air Corps Tactical School (ACTS) was organized in the early 1930s to study and develop tactics for implementing air power in combatant roles in future wars. The ACTS embraced Douhet's and Mitchell's writings on the role of air power and subsequently developed an air doctrine and several tactics for air power in future wars. The ACTS played a significant role in Army Air Corps planning and in 1940 four officers from the school staff were selected to comprise the first Air Staff planning team. The Air Staff was responsible for the development of long range planning for the use of air power in World War II. Called War Plans Division I, the plan became the blueprint for the creation of the Army

Air Force and the conduct of the air war against Germany. Embracing the theories of air power presented by Douhet and Mitchell, the first planning staff was convinced of the importance of strategic bombing and the need for an independent air force to properly implement the advantages of air power. [Ref. 3:p. 17]

III. POST WORLD WAR II PLANNING

The Army Air Force's "air strategy" (developed by the officers from the ACTS and incorporated into the first war plans implemented by the Army Air Force in WW II) continued to emphasize the need for strategic bombing directed by an independent air force. As the war turned in favor of the Allies, General Arnold, the commander of the Army Air Force, issued new directives to his planning staff to begin planning for the future of air power after the war.

By 1945 the planning staff was encountering considerable opposition to its future plans for air power due to ongoing studies of the effects of strategic bombing on the war in Europe. Reports such as the Strategic Bombing Survey questioned the postulation that air power alone could win the war. In August 1945 the staff's dilemma over strategic bombing was solved as COL Tibbets of the 509th Composite Bombing Group dropped the atomic bomb on Hiroshima, Japan. By 1947 the Department of the Air Force was created as an independent branch of the armed forces of the United States

and strategic bombing was the buzz word by all discussing future wars. With long range bombers and nuclear weapons, air power directed by the Air Force was the deterrent solution for the perseverance of peace or winning any future war. The Air Staff had succeeded in reaching its goal of an independent air force and permanently establishing the place of strategic bombing in future wars. The next planning project of the newly created Air Force was a long range study called "Toward New Horizons." Toward New Horizons became the foundation plan for the structure and force composition of the Air Force during the 1950s and 1960s. [Ref. 4]

In 1976 a study was undertaken at the request of the Air Force by the Rand Corporation to determine what technologies should be pursued to develop the capabilities that will be needed in the future. In addition to studying long range development/planning methods, the study also examined strategic planning in the Air Force. The recommendations of the Rand report appear instrumental in the reorganization of strategic planning by Secretary of the Air Force John Stetson.

The report found strategic planning continued to be a function of the Air Staff as it had since the 1930s. However, the Air Staff's performance in the role of strategic planning varied markedly from the ideal strategic planning conception. The only formal setting of future

goals accomplished by the Air Staff occurred during the formulation of the POM. The POM is a force procurement document that is based on standard threat projections and current national security policy direction. The POM is a functional planning and management control document, not a strategic planning document. As long as Air Staff directorates were responsible for providing guidance for the POM, long range strategic planning was left undone. [Ref. 5]

> With only a limited variety of long-range goals presently developed--and these by methods inappropriate to the uncertainties of a distant future--and without a realistic assessment of future resource availability, it is not surprising that the Air Force seems to lack clear formulation of its strategic policy. At present there is no Air Force statement of its decisions about long-range policy or its corporate view of future priorities. Particularly lacking are any intimations of its corporate preferences as to the future force and system goals....Strategic policy recommendations do reach the Air Force's top level management from time to time in the form of special studies and as by-products of current program reviews.... Reports from these study efforts may gain wide circulation as a result of high level Air Staff encouragement. Seldom, however, is it made clear whether the policy recommendations of these reports are endorsed or rejected as official expressions of Air Force long-range strategic policy. [Ref. 5:pp. 69-71]

The report recommended a change in the organizational structure with the strategic planning staff established as an element of the Chief of Staff's personal staff. The change would allow access to the top leadership of the Air Force and increase the credibility of the planning staff. The Strategic Planning Staff would then be free to prepare a strategic planning document under the direction of Air Force leaders without conflict from other Staff Directorates whose

primary responsibility is preparation of the POM. Alternative futures that might threaten current programs would be considered at least by the top leaders prior to their modification by special interest groups within the Air Force. The Rand report recommendations along with the Long Range Planning Study Group report resulted in long range planning changes that are found in the planning process today.

IV. LONG RANGE PLANNING TODAY

Since Secretary of the Air Force John Stetson's feasibility study in 1978, long range planning within the Air Force has become an integral part of the planning and procurement process within the Air Force. Interchanges between the Secretary of the Air Force and Chief of Staff remain the foundation of the process and provide the inputs for development of the Planning Guidance Memorandum (POM). In addition to integrating long range planning into the overall Air Force planning process, active participation by the major Air Commands also takes place. The USAF Global Assessment has become the supporting document for the Planning Guidance Memorandum (PGM). Prepared by the Long Range Planning Staff (or contracted out by the staff), this document looks forward 15 to 20 years and provides a long range view of the environment in which the Air Force expects to operate.

The centerpiece that makes the planning system function is the PGM. The PGM provides broad executive guidance and long term perspectives to initiate the planning cycle. From the guidance provided by the PGM the planning staff then develops the USAF Planning Guide. The Planning Guide provides a rank order of the future capabilities the Air Force requires to perform its missions. From the Planning Guide Air Force Staff Directorates develop the Planning Input and the Strategy and Policy Assessment. These documents are used by programmers to provide input into the Air Force POM which is the guiding document in the procurement process. Figure 1 provides a flow diagram of the Air Force long range planning system. [Ref. 6] Although an organized process for planning exists, that does not necessarily indicate successful long range planning. The following is a brief analysis of today's long range planning process.

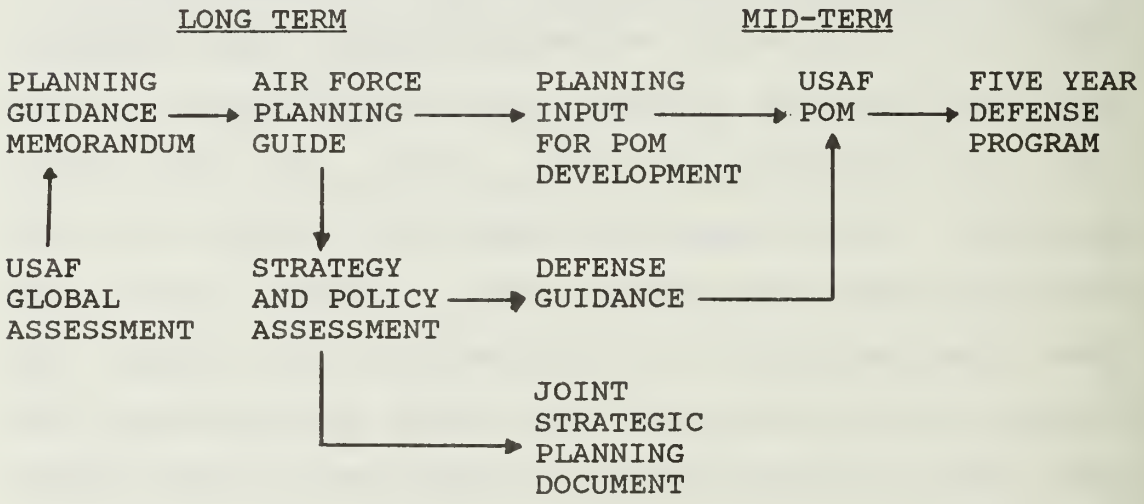

Figure 1. The USAF Planning Process

V. ANALYSIS

A. ASSUMPTIONS

Although one would think that after 40 years the importance of air power was firmly established in the minds of all Americans, this does seem to be the case to Air Force leaders of the past or present. The USAF Global Assessment seems to indicate a failure of the national military strategy to emphasize the importance of the two most important themes to Air Force planners, i.e., a need for an independent Air Force and the importance of air power and strategic bombing. Because previous planning systems provided too many opportunities for individual unit interests and in-house (within the Air Force) controversies, the importance of air power could be diminished. To prevent such fragmentation of mission and importance of air power, the Planning Guidance Memorandum (PGM) attempts to provide the top down direction needed to diminish such controversies. It seems Air Force leaders saw a need for improvements in long range planning, however, they failed to see their own biases that could hinder effective strategic planning. How well today's system is working is still being evaluated, but some strengths and weaknesses can be observed.

B. STRENGTHS

The major strength of the current system is seen in the clearly defined planning process and the delegation of

responsibilities by the top leaders of the Air Force. The importance of top down direction has been substantiated by the business community and adopted by the Air Force. In addition to top down direction, Air Force leaders provide clearly defined goals to all Air Force commands and receive feedback from those commands. Long range goals are subsequently updated annually to attempt to provide rapid integration of the changing international situations and fast paced technological changes presented through feedback and contract studies.

Another strength of the system is in its attempt to work within the DoD system. The Long Range Planning Staff provides inputs based upon long range views of the future roles of air power to both Joint Planning Staffs and procurement staffs. Incorporated within the system is an effort to implement the Air Force view of the future into the DoD procurement system and influence the systems that will be developed and procured in the future.

C. WEAKNESSES

An apparent weakness in the planning process is seen during the preparation of the Global Assessment document which provides guidance to the Secretary and Chief. Because of the all-encompassing scope of the national military strategy and the broad definition of national interests by the Executive Department, the Air Force attempts to define national interests by looking through Air Force glasses.

This action injects biases at the beginning of the planning process as the national interests are defined by those with special interests in perpetuating air power. A better plan would be developed if the national strategy were stated more explicitly and air planners were then tasked to provide future plans based on those strategies.

One weakness noticed is the Air Force's reluctance to consider all uses of air power in their long range plans. If an independent direction of air power is the most efficient method, then inter-service rivalry should be diminished and all air platforms and capabilities should be considered as a whole. Although the Navy and Army would likely oppose such plans, they should still be presented along with the consequences of continued fragmentation of air power.

Another weakness noticed is the lack of control by the Air Force of the air assets of the Air National Guard and the lack of inclusion of their impact on future planning. Development of the Air National Guard should be in accord with the future as perceived by Air Force long range planners for maximum utilization of those assets during a national crisis.

Another failure often cited is that strategic planning is not really long range. Most plans seem to diffuse at the same point as the POM ceases to consider the future. Although this relationship may be difficult to prove, the

impact budget planning has on long range strategic planning can be questioned. Those who accomplish the planning also cycle between staff and operational billets and are intimately familiar with the personnel in both operational and budget positions. To describe a future where a system currently being procured would be unnecessary would probably spell disaster for the career of the planner. A possible solution to these types of conflicts would be to establish permanent professional planners and integrate more civilians into the process.

The final weakness noted was the power Air Force Systems Command has on future planning and the control it exercises over the entire Air Force procurement process. Although the planning process has top down direction, goals and objectives presented by the planning staff must pass through Systems Command before they get to the programmers who prepare the POM.

VI. CONCLUSION

Air Force long range planning appears to be the best functionally organized planning process within the services. The Air Force has learned much from the business world and integrated those procedures that seem most beneficial in its planning process. The top leaders are involved in the process and provide direction to all echelons of the Air Force. If strategic planning in the Air Force continues to

receive the direction from the leadership that it has in the past, the system should continue to improve and produce credible alternatives and much needed guidance to procurement programmers.

LIST OF REFERENCES

1. Gropman, LCOL Alan, "Long-Range Planning, a New Beginning," Air Force Review, November-December 1979, pp. 49-54.

2. Douhet, Giulio, The Command of the Air (New York: Coward-McGann, Inc., 1942), pp. 192-193.

3. Watts, LCOL Barry D., The Foundation of U.S. Air Doctrine (Air University Press, Maxwell AFB: 1984), pp. 7-11.

4. Smith, Perry M., The Air Force Plans for Peace (The Johns Hopkins Press, Baltimore: 1970), p. 17.

5. Simmons, W.E. et al., Long Range Development Planning in the Air Force (Rand Report #R-1989-PR, September 1976), pp. 64-66.

6. Smith, Perry M. et al., Creating Strategic Vision (National Defense University Press, Washington: 1987), pp. 33-39.

THE NATIONAL DEFENSE STOCKPILE: PLANNING FOR MOBILIZATION OR POLITICS?

LT Walter Kreitler

I. PROGRAM BACKGROUND

The United States Strategic Mineral Stockpile has endured changes in U.S. warfighting strategy, world non-fuel mineral market conditions and various domestic special interest groups to emerge a federal program inconsistent in its ability to implement United States defense policy. Like many programs with a constituency which pursues ends for which the program was not designed, the Strategic Mineral Stockpile operates in a climate which fosters stable markets and deficit control vice mobilization preparedness.

The contemporary situation regarding the National Defense Stockpile is typical of its 30-odd year history. The logic of having the stockpile reflect contemporary U.S. warplanning is irrefutable. To this end the amounts and types of material that should be available for emergency use provides for the worst case wartime scenario. The current National Security Strategy of the United States published in January 1988 discusses the need for;

> On the industrial side, the maintenance of a broad, techologically superior mobilization base is a fundamental element of U.S. defense policy...this capability supports

deterrence and provides the ability for a timely and flexible response to the full range of plausible threats.[1]

The rebuilding of U.S. military capabilities in the early 1980s has enabled the U.S. to react with flexibility to meet whatever threat it viewed as pressing. Clearly, the revitalization of U.S. military forces committee to the North Atlantic Treaty Alliance (NATO) has enabled that organization to credibly maintain a conventional deterrent. The cornerstone of the U.S. deterrent is the ability, and the intention, to escalate horizontally and in the dimension of time. It is in the dimension of time that the National Defense Stockpile comes into play.

The Reagan Administration inherited an NDS program from the Carter years that utilized a three year time horizon for executing mobilization and warfighting. In the sense that this provided a clear dictate for war planning purposes the NDS had a well-managed supply of a wide variety of materials, albeit not all truly critical or strategic. Some significant gaps did indeed exist (and still do) in various critical materials, most notably in the Platinum metals group and titanium. Despite this, the general trend has been to maintain the planned stockpile as it has existed since the mid-1960s without regard to major swings in military planning contingencies.

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[1]National Security of the United States, January 1988, The White House, Washington, D.C., p. 21.

TABLE I

AGE OF NATIONAL DEFENSE STOCKPILE ASSETS[2]

LAST PURCHASED	# ITEMS	% TOTAL	NOTES
1953-1964	36	42	Includes $.94B in tin
1965-1972	32	38	Includes some ferro-alloying materials no longer produced in U.S.
1973-1979	0	0	
1980-1988	16	32	Upgrades and new purchases.

II. THE EVOLUTION OF STOCKPILE MANAGEMENT

The origins of the need for a strategic reserve of material was recognized in the 1880s.[3] While the initial exploration was only to determine what mineral shortcomings existed in the contiguous United States, the pre-World War II Reconstruction Finance Corporation established via the Strategic and Critical Materials Stock Piling Act of 1939, served to martial critical and strategic materials.[4] Following the Second World War, the stockpiles were

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[2]Federal Emergency Management Agency, "Stockpile Report to Congress," January 1988, pp. 8-9, 19.

[3]Amos Jordan and Robert Kilmarx, Strategic Mineral Dependence, Center for Strategic Studies Georgetown University, Sage Publishing, Beverly Hills, CA, 1979, p. 40.

[4]Strategic minerals are those not available in the United States vice critical minerals which, while important, are available in the Continental United States.

subsequently consolidated by legislation of 1946. This legislation established the Army Navy Munitions Board as the cognizant authority for determining the mobilization requirements. The 1950 Strategic and Critical Materials Act is in effect today is the authority by which current materials are stockpiled.

This Act required that the NDS be managed by a committee consisting of representation from the Departments of State, Commerce, Treasury, Defense, Interior and Agriculture. Clearly, each member of that group had his own agenda. From the view of the Department of Interior, the NDS was the perfect tool to protect the domestic mining industry. Agriculture's interest was in the Barter Program, in which excess foodstuffs procured with federal subsidies could be exchanged for minerals. Commerce, Treasury and State all were interested, albeit for different reasons, in where the minerals for the NDS were purchased, under what terms and what impacts this would have on the mineral market prices.[5]

These bureaucratic forces were largely counterproductive to determining the actual requirements. The primary determinant of the NDS composition should be the type of war and mobilization being planned for. The evolution of nuclear weapons and strategy had little impact on the initial requirements of the stockpile. Until 1958 a five year

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[5]Raymond Mikesell, Stockpiling Strategic Materials, American Enterprise Institute, Washington, D.C., 1986, p. 12.

mobilization was planned on. In 1958 the National Security Council and the Joint Chiefs of Staff prevailed and a three year planning horizon was implemented.[6] This remained the normal stockpile goal through today, with a hiatus in the Nixon Administration which called for a one year stockpile.[7]

One feature of NDS operations which makes the measurement of total requirements difficult is that the level of planning must make arbitrary assumptions about the wartime civilian economy, some of which involve unpleasant issues. In addition, stockpile goals are only adequate to mobilize the economy, not sustain it in every category of NDS holdings. In cases where no domestic production capacity existed or foreign supply was not reliable, then the stockpile would be required to be a three year supply.[8]

The actual amounts of material required are currently derived via a system devised under President Ford's Administration. Under this plan, three tiers of requirements were organized, military needs, essential civilian needs and general civilian needs. Within these areas amounts needed to sustain the war effort are computed. Factored in are time phasing of warfighting, problems with lead times for

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[6]Mikesell, Stockpiling Strategic Materials, p. 17.

[7]Jordan, Strategic Mineral Dependence, p. 45.

[8]Jordan, Strategic Mineral Dependence, p. 45.

production and problems with supply of minerals mined overseas.[9]

The system for determining aggregate NDS requirements is complicated by the nature of reliability of sources, the degree to which sea lines of communication will be assaulted, and the nature of the war itself. These items are specifically not mentioned in summary of the Annual Materials Plan (AMP), the annual plan that directs stockpile operations. In addition there exists the difficult problem of ascertaining the nature of the civilian sector of the economy in a mobilization scenario. This combination of key wartime problems is balanced against more mundane (although in peacetime no less important) issues. Specifically:

> The AMP is developed in a manner that balances National Defense Stockpile requirements against the need to avoid undue market disruption and to conform with budget limitations.[10]

In summary, the plan for the NDS is generated by the requirement to mobilize U.S. industry for a three year war, in which some minerals will not be available from the continental United States (CONUS). After determining the aggregate needs of essential industries to execute this mobilization, annual incremental changes to the NDS are made

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[9]Mikesell, Stockpiling Strategic Materials, p. 35.

[10]"Stockpile Report to Congress," Federal Emergency Management Agency, August 1987, p. 20. It should be noted that the AMP is generated from an Interagency working group that does involve DoD input.

primarily on the basis of not disrupting markets, via the AMP.

III. PLANNING CONSTRAINTS FOR THE CONTEMPORARY NDS

As mentioned earlier, the goals of the NDS are to ensure that the United States mobilization efforts are not hampered by a lack of any particular mineral. The determinants of how much and of what are largely a function of what type of mobilization will be expected. The degree of access to outside sources and the level of support given the non-defense sector of the economy are also key issues. That these planning guidelines are obvious is not to say they are the absolute constraints on NDS objectives. A large and varied group of officials dictate requirements for the NDS, all with different bureaucratic agenda.

With the problems inherent in reaching a consensus amongst an inter-agency working group acting as a barrier to changing the NDS holdings, the Reagan Administration took the initiative in the summer of 1985. In ordering the National Security Council to study NDS composition, the NSC was given the commission to conduct a zero-based review. The results of the study indicated that the NDS was largely surplus material, and the NDS goal should be reduced in dollar value from $16.1 Billion to $.7 Billion.[11] By

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[11]General Accounting Office, "National Defense Stockpile," May 1987, Washington, D.C., p. 2.

proposing to reduce the NDS holdings by 59% through sales, the Administration hoped to be able to modernize the remainder of the stockpile by purchasing materials of a more suitable quality.[12] By readjusting the levels of various minerals, some gains could be made in aggregate stockpile holdings in areas where the NDS was deficient.

In the White House announcement of 8 July 1985 to reduce the NDS levels and restructure the overall amounts in various holdings the Administration cited the following as rationale:

> This [1984] review concluded that a number of basic errors and unrealistic assumptions were used in the 1979 study. The present study relied on more realistic assumptions regarding oil availability, essential civilian requirements and domestic materials production. The new stockpile, unlike the one proposed in 1979, does not reflect the stockpiling of materials to ensure non-essential consumer production in a protracted military conflict. The stockpile does reflect essential civilian goods production with per capita consumption at more than twice the WWII level....In all areas the latest, best available data was used. By contrast, the previous 1979 stockpile goals relied on 1967 data in many cases.[13]

The model used to generate requirements is a complex production function; a combination of sensitivity analysis and macro-economic theory. The model relies on factors such as taxes, interest rates, civilian sector demand, etc. The American Mining Congress, representing the U.S. mining

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[12]For instance, the capacity to utilize some materials held is no longer available in the U.S., in addition some items have a shelf life or are no longer utilized in industry. See Table I.

[13]White House Press Release, July 8, 1985, Washington, D.C.

industry in Washington, D.C was never consulted regarding industry input for the stockpile model.[14] This is a key discontinuity in the stockpile planning process. The model accounts for a variety of contingency plans, yet the U.S. mining industry may not be capable of mobilizing to the degree the current plan calls for.[15]

The planning constraints for the National Defense Stockpile are clearly outlined in the most recent Strategic and Critical Materials Stock Piling Act. The ultimate goal of the NDS is to ensure:

> The quantities of the materials stockpiled should be sufficient to sustain the United States for a period of not less than three years in the event of a national emergency.[16]

This goal, according to the White House proposal, can be met with a revitalized NDS which, although small in absolute holdings, reflects the current U.S. capacity to utilize the materials at hand. This is a major point of contention. One issue agreed upon by both the American Mining Congress and the Federal Emergency Management Agency (currently the custodians of the NDS) is the inability of U.S. industry to use some of the materials held in the stockpile. Both organizations cite the movement of the ferro-alloy industry

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[14]Discussions with American Mining Congress officials, 13 May, 1988. Also GAO Report on NSC study, pp. 2, 28, 32.

[15]Discussions with American Mining Congress officials, 13 May, 1988.

[16]The Strategic and Critical Materials Stock Piling Act (Public Law 96-41, United States Code 98 et seq.).

to "off shore" (read overseas) locations as representative of this problem. U.S. industries require more finished products in terms of the metals industry than was true in the 1950s when the NDS was established.[17]

Up until the proposal by the White House to sell off a major portion of the NDS, the degree of freedom given the President was substantial in managing the stockpile. Congress, opting to side against the Office of Management and Budget, wanted to retain control over the NDS, and constrained Presidential action by requiring Congressional approval for sales of the magnitude proposed in July of 1985.[18]

These guidelines are a sharp departure from years prior when a great degree of freedom was given to the Executive Branch to administer the NDS. Clearly these changes are in direct response to the Administration plan to reduce the NDS holdings and change the composition of the stockpile itself.

IV. NATIONAL DEFENSE STOCKPILE: CAPABILITY VERSUS PLANNING

Three areas of analysis are required to examine the NDS strategic plan, and its ability to assist in generating a mobilized war economy. First, and most basic to determining

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[17]Conversations with FEMA and AMC officials, dated 16 May 1988.

[18]National Defense Stockpile Amendments of 1987 (Public Law 100-180, December 1987).

NDS success, is the fit of NDS holdings to current National Defense Strategy Goals. Second, are the holdings adequate for these plans, and more critically, is the material usable to industry to produce wartime equipment and munitions. Lastly, to what degree is the NDS planning and execution free from political interference. In evaluating these three key issues, the measure of potential utility of the NDS can be judged. It will be the purpose of this section to determine whether the various legislation enacted regarding the NDS since 1980 has been to increase its ability to serve the nation in crisis or to further political and bureaucratic agendas of various involved organizations.

A. CURRENT NDS HOLDINGS VERSUS NATIONAL MILITARY STRATEGY

The current composition of the NDS is only somewhat indicative of the type of declaratory military currently espoused by the White House. In reviewing the key holdings of the NDS (see Appendix A), several key questions arise. Do these materials enable the contemporary U.S. industry to mobilize for three years and fight and win a protracted global war? Are the supplies of materials that must come from overseas capable of arriving via long ocean transits and/or from reliable suppliers? Is the NDS capable of providing enough material for the civilian economy to avoid any problems with morale and shortages on the home front? All these questions must be addressed. In addition, assuming the minimal amount of NDS holdings would be

adequate to see the nation through a war, is an additional amount required to supply our Allies or to assist in post-war transition to a civilian economy?

B. UTILITY OF CURRENT NDS HOLDINGS

It is difficult to ascertain to what degree the NDS would be useful in mobilizing U.S. industry. Stockpile officials have a rather lengthy procedure for releasing NDS holdings, a procedure which bears review here. In order for the materials to be used they must be first released by the President, as per the current law.[19] Even after Presidential release, material must not be available in the United States at any price. Following both the necessary and sufficient conditions, the President is petitioned via the Departments of Commerce and Defense to allow the NDS holdings to be purchased by a company producing defense-essential materials.[20] While the administrative processes may be cumbersome, it can easily be imagined how this could be facilitated in a crisis. What would be difficult to follow is how the knowledge of the NDS would impact prices in a mobilization scenario. Obviously, the mobilization is the only important issue, yet in a pre-crisis phase, the acquisition of war materials would be very important. That

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[19]United States Code, Title 50, Public Law 96-41 (effective date, 31 March, 1987).

[20]Conversations with FEMA personnel, 16 May, 1988.

industry could turn this into a bone of contention via price gouging could create problems in a critical time.[21]

The question of the quality and utility of the NDS holdings is one which is addressed by the Administration NDS reductions proposal. The types of material held are not usable in their stockpile form. For example, chromite ore comes in several grades for various purposes. The U.S. does not have the capacity to refine these materials into required forms.[22] These two factors led to the Ferro-alloys upgrade program in which some materials will be modernized via sale and purchase of semi-finished material. While this program is the correct direction for the NDS to go, it would be very expensive to upgrade all required material in the near term.

C. MOBILIZING THE U.S. METALS INDUSTRY

The only real model for war mobilization in the United States is the Second World War. In this war the United States continued to import many strategic materials. In examining this model several problems become obvious:

1. 81% of all specialized ore carrying ships were sunk in the period January 1942 through December 1942.

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[21]The August 1987 Stock Pile Report to Congress points out the need to initiate mobilization prior to the outbreak of hostilities, page 66.

[22]Raymond F. Mikesell, Non-Fuel Minerals: Foreign Dependence and National Security, University of Michigan Press, Ann Arbor, MI, 1987, p. 154.

2. Over 200,000 tons of mineral products had to be transported by air in 1943 alone.

3. In some critical fields the supply was so tight that loss of a single ship caused a bow wave of tightening in many industries.[23]

With these problems in mind, it is difficult to understand the rationale used by the National Security Council in determining shipping attrition issues in the study of strategic materials in mobilization. Specifically, the head of the working group involving Sealane Attrition was initially an Assistant Secretary of the Navy for Ship Building and Logistics. He was replaced after six months by a representative from OMB, whose credentials go unmentioned.[24]

The NDS of today must be able to supply industry with material it may use immediately. The industrial base that went to war in 1941 no longer exists today. Many basic industries have been forced out of operation in the U.S. due to problems in the areas of labor costs, environmental protection, depleted resources and excessive regulation. The stockpiling of raw material for an industry which may not be able to process them in time of crisis is a dangerous diseconomy. In time of mobilization, no shipping will be available to transport U.S. materials to foreign smelters to be shipped back to the United States.

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[23]Items #1, #2, #3, John Morgan, The Domestic Mining Industry in the United States in World War II, Pennsylvania State College, U.S. Government Printing Office, 1949, pp. 330-341.

[24]GAO, "National Defense Stockpile," p. 27.

On one hand the stockpile must be varied enough to support all industrial needs in a mobilization, yet it must accurately reflect current capacity for the U.S. metals industry. This includes incorporation of new technology into NDS planning. An example of a key strategic mineral being made relatively less important is cobalt. In production of aircraft jet engines, substitutes of various alloys (nickel, aluminum and molybdenum) have been found more effective in turbines and compressors than cobalt alloys.[25]

As an aside, the NDS program is heavily involved with research for substitute materials. The range of programs runs from metallurgical research to growing rubber (guayule) domestically. These programs are administered by a variety of Departments, involving Agriculture, Defense, and Interior being the leading agencies.[26] Mineral substitution programs are much more controversial as they involve examining various areas for possible deposits. Naturalists have historically opposed research into designated Wilderness Wildlife Areas. This is a powerful force to contend with not only for production, but to merely examine potential.[27]

The American Mining Congress is not comfortable with the NDS for several reasons, not all of them significant to mobilization. What is of import, however, is the industry

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[25]Mikesell, Stockpiling Strategic Materials, p. 61.

[26]"Stockpile Report to Congress, January 1988," p. 34.

[27]"Stockpile Report to Congress, January 1988," p. 23.

concern of a disconnect in the types of materials needed and the types of material available upon mobilization. The types of material available do not reflect the U.S. smelter capacity to process it. For instance, the U.S. domestic steel industry continues to shrink. The total U.S. output will drop by four percent between 1985 and 1990, and no new blast furnaces are planned in this timeframe.[28]

With these types of problems endemic in the metals industry, the ability to sustain production in wartime may be very difficult. Military uses of metals, even when displacing civilian production, are high. There are no guarantees that the current capacity would survive intact a war which might include various types of sabotage, long-range precision guided munitions, or worst case, use of nuclear weapons.

D. PLANNING FOR A WARTIME ECONOMY

Amongst all the various elements involving the generation of NDS goals, none is more contentious or sensitive than the nature of the wartime economy civilian sector. The degree to which factors of production are diverted to civilian use is important for two reasons. First, increased civilian use will entail (if sustained) a requirement for larger NDS holdings. Second, the morale factor of having to

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[28]William Hogan, Steel in the United States; Restructuring to Compete, Heath and Company, Lexington, MA, 1984, p. 137.

do without requires a degree of sacrifice which is largely foreign to the "American way of war." Even in World War II, the U.S. economy grew at roughly 3% per annum. There is no guarantee that this would be possible in a future global war involving mobilization. In the major reductions proposed in the summer of 1985, the third tier, non-essential civilian production was given a thorough review. The study on which the new plan was based required that stockpile requirements for non-essential civilian production be eliminated.[29] In addition the new study revealed that earlier programs had made incorrect assumptions regarding the availability of oil, and domestic mineral production.[30] The sanguine approach taken to dismiss civilian non-essentials may make sustained war effort more difficult in terms of keeping the population behind the war effort. The primary discussion of this aspect of the NDS is addressed in the response of the National Security Council (NSC) to GAO criticisms of new planning methodology. In the response the NSC made three main points.

1. A 50% increase in both civilian and defense sectors of the economy would not be possible due to oil shortages and wartime production requirements.

2. The economy will not be able to expand to meet non-essential civilian needs due to wartime production needs.

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[29]"Stockpile Report to the Congress, 1987," p. 58.

[30]"Stockpile Report to the Congress, 1987," p. 58.

3. The GAO recategorization of 50% of non-essential to essential for purposes of stockpiling criteria is contrary to the spirit of the NDS.[31]

In the final analysis, the reason the Reagan Administration proposed the reduction in the NDS was due to the NSC study citing the need to restructure (and reduce) the stockpile to better fit a realistic wartime economy. The NSC, and the OMB, both felt the NDS was out of line with the war scenario that the NSC found most likely. The GAO response was that the assumptions, although accurate to a degree for the scenario postulated, did not represent worst case, or even provide for a reasonable range of contingencies. This divergence of opinion in the most basic of issues, the nature of mobilization to utilize the NDS, is the central issue of the NDS debates.

V. CONCLUSION

The conclusions and lessons to be drawn regarding the strategic management and planning for the NDS fall into two groups. First, to what degree does the stated purpose and composition of the NDS match the National Defense Strategy, and secondly, how does the NDS match the real requirements for mobilization. It is always difficult to assess the effectiveness of a plan that is never executed, often

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[31]National Security Council letter dated 22 April 1987, Serial 2995, to the General Accounting Office, Office of the Comptroller General.

debated and never fully funded. Despite this there seems to be a belated correlation (since the early 1970s) between the NDS and what the National Strategy purported to be. The truly critical problem is the reconciliation of the NDS and the mobilization capacity.

A. NATIONAL DEFENSE STRATEGY AND THE NATIONAL DEFENSE STOCKPILE

The NDS under the current administration has reflected two major thrusts of policy. First, by modernizing the NDS (which included reducing it in absolute terms), an effort was made to actually procure material which would be useful to U.S. industry during time of war. It can be stated as proof that the entire effort of reinvigorating the Department of Defense would be incomplete without reviewing the mobilization capacity.[32] As an important adjunct to that, the sale of NDS assets would finance the purchase and upgrade of materials required under a new NDS plan. As a reduction of holdings on the order of 59% was proposed, a substantial amount of surplus funds would be transferred to the U.S. Treasury to reduce the Federal Deficit.

This proposed sales program and subsequent transfer of funds is what has become a political problem. The Law as enacted on 31 March 1987 specifically states:

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[32]It should be noted that a JCS exercise held in 1978, "Nifty Nugget," highlighted some of the key weaknesses in the NDS holdings.

> The purpose of the Stockpile is to serve the interest of national defense only and is not to be used for economic or budgetary purposes.[33]

The proponents of selling off the NDS and "freshening" its holdings include the Department of Defense, and to a lesser degree, industry officials. The mining industry does not want to see any disturbances to the free market for minerals. The fact that the revenues would be transferred to the Treasury to eliminate some portion of the debt is of interest to many who view the sales program as an error. The Office of Management and Budget (OMB) sees the NDS as a potential for deficit reduction. Industry sees NDS sales as not only affecting markets, but also creating problems for mine subsidies.

If the sales program can be taken at face value and assume the Administration was only interested in actually improving the overall defense posture, then the deficit reduction argument loses its momentum. Since the Reagan Administration has sought to improve all U.S. defense capabilities across the board, it would seem that this argument is not reasonable. Nonetheless, Congress passed legislation which essentially requires the President to have approval prior to making major adjustments to NDS holdings.

The management control of the NDS will pass to the Defense Logistics Agency by July 1, 1988. Government

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[33]Public Law, 96-41, Title 50 U.S. Code, Section 3, Paragraph b. It is of interest that this constraint on NDS use comes before the quantity and length of mobilization section.

officials hope to find a greater level of support for NDS issues in the new management arrangement. Some skeptics, however, cite the Pentagon as having "larger fish to fry" and see the transfer as an admittance of the NDS being too hard to update to usable levels, and too entrenched to be done away with.[34]

In terms of incorporating the NDS into military strategic planning, several important items are of note. The Navy Maritime Strategy, which foretells of relatively little interference in the Sea Lines of Communications (SLOCs) is taken as an article of faith by the NDS plan which calls for reducing the total stockpile. The ability to obtain minerals from nations other than Mexico or Canada is viewed as a reasonable planning assumption. Despite the earlier noted experience of WW II shipping losses, and possible problems with political reliability for some African mineral rich states, an optimistic view of free use of the seas in a protracted conventional war is an important planning feature of the revised (and unimplemented) NDS goals.

B. THE UTILITY OF THE NATIONAL DEFENSE STOCKPILE

The utility of the NDS is a function of what the stockpile consists of, the release procedures, the degree of crisis and, most importantly, the ability to turn minerals

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[34]FEMA, the current controlling agency does have a large and varied agenda, to include housing for the homeless, etc.

into munitions. Having discussed at length the various components of the NDS, the release criteria, it is now time to examine if any NDS at all can be utilized.

In 1981 there were but five plants capable of making the large metal forgings required for large aircraft parts. There was only one factory capable of forging tank turrets and hulls, the remaining were out of business due to lack of demand and high costs from regulations regarding Occupational Safety and Health Administration. Exotic metals forgings and castings can require a lead time of over 120 weeks.[35] These are not the signs of an industry capable of wartime surging. Of course, the example of the Second World War would imply that the excess capacity exists, yet, that capacity existed in the form of plants, foundries and yards which were underutilized (initially) and only later included new factory production. There is little evidence to support the notion that U.S. industry would be capable of rapidly supporting an exponential growth of high technology weapons and munitions production. In fact, a 1976 Defense Science Board Plan for Industrial Mobilization was labeled "virtually worthless" by that same Board in 1979.[36] Little has happened that would refute that assertion.

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[35]"Industrial Planning and Defense Planning," Senior Conference Final Report, United States Military Academy, West Point, NY, June 4, 1981, pp. 6,7,8.

[36]"Industrial Planning and Defense Planning," p. 8.

The Reagan Administration plan which would have upgraded the NDS ability to contribute to an industrial mobilization faces strong political opposition. The Congress moved quickly to protect the NDS from sale (and modernization) and has only provided the appropriations for upgrade to continue the Ferro-alloy program. This is also an issue in light of the program's key role in maintaining any ferro-alloy furnace in the United States.[37] The Reagan Administration has sought to align the NDS with its National Defense Policy. The amount of success has been hampered by a desire in Congress to not allow the NDS sales to impact metals market prices and to maintain the NDS as is.

In light of the Executive Branch's historical and continuing efforts to maintain an NDS which was in line with the contemporary view of the most likely mobilization scenario, no gains can be forecast for the NDS as a whole. Unfortunately, the concept, although well-conceived, was poorly executed. This does not mean that the NDS is without use. It simply means that it is as useful as it can be within the constraints applied politically. Since there is only marginal bi-partisan support for defense issues in general, the NDS in particular, there are, to quote an unnamed NDS official, "larger fish to fry." The impact of this will only be realized in the worst case, a total war.

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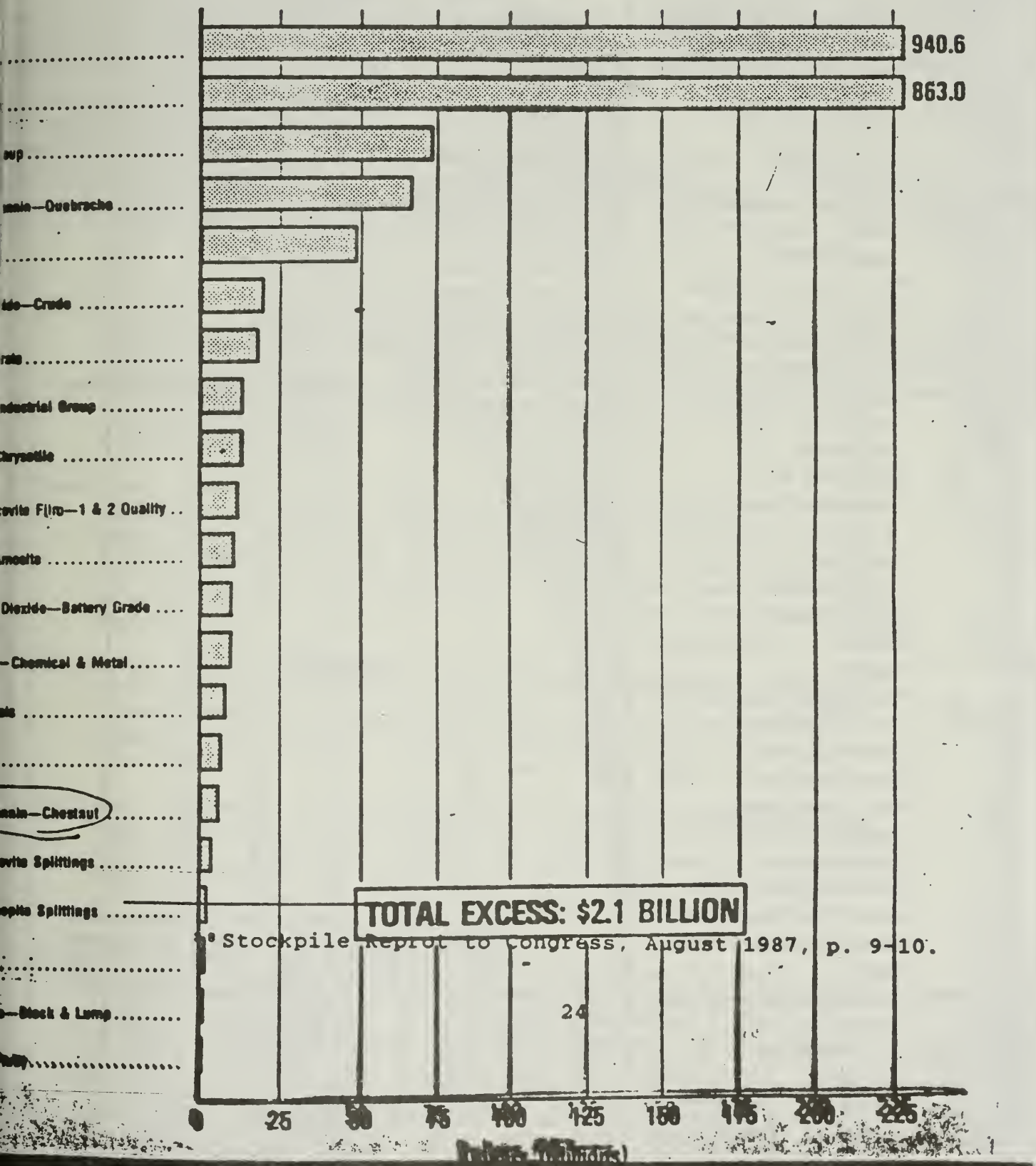
[37]"Stockpile Report to the Congress, January 1988," p. 2.

The "Post Industrial" United States has to make a conscious (and expensive) decision as to the value of maintaining an industrial base capable of mobilizing to fight a prolonged war. Until this decision is made, any declaratory policy will be just declaratory.

Figure 5

EXCESSES IN INVENTORY OF STOCKPILE MATERIALS

AS OF SEPTEMBER 30, 1987

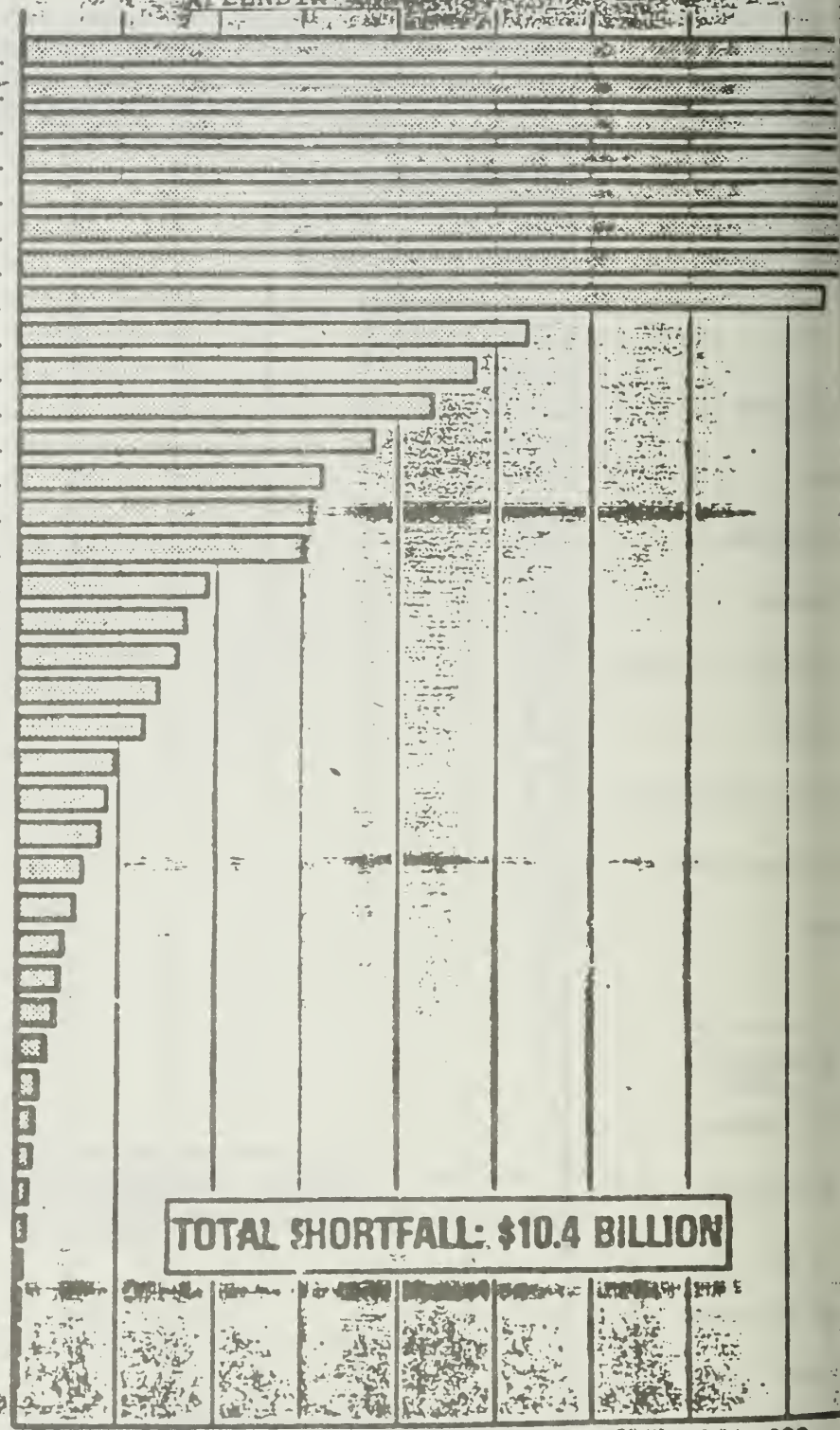


[1] Stockpile Reprot to Congress, August 1987, p. 9-10.

SHORTFALLS IN INVENTORY OF STOCKPILE MATERIALS

AS OF SEPTEMBER 30, 1987

APPENDIX C



ANNOTATED BIBLIOGRAPHY

Chang, Julius, "U.S. Chromium Market," Resources Policy, September 1987, Butterworth and Co., Washington, D.C., pp. 207-227. A quantitative study of the U.S. chromium market which analyzes via a complex econometric model, various factors affecting chromium.

Hogan, William T., Steel in the United States, Lexington Books, Lexington, MA, 1984, 157 pages. In-depth analysis of the attempts by various U.S. steel manufacturers to restructure their capacity through the late 70s and early 80s. Prescriptive for all domestic metal industries.

Jordan, Amos and Kilmarx, Robert, Strategic Mineral Dependence: The Stockpile Dilemma, "The Washington Papers," The Center for Strategic and International Studies, Beverly Hills, CA, 1979, 83 pages. Broad overview of the issues of stockpiling strategic minerals with recommendations for changes to stockpile goals and mining regulations.

Leontief, Wassily, and Kook, James, The Future of Nonfuel Minerals in the U.S. and World Economy, Lexington Books, Lexington, MA, 1983, 454 pages. A forecast of the future demands for 26 different minerals under different conditions through the year 2030. A great deal of quantitative analysis with a wide variety of assumptions.

Mikesell, Raymond, Stockpiling Strategic Materials, American Enterprise Institute, Washington, D.C., 1986, 68 pages. A comprehensive review of the current U.S. stockpile program by a member of the committee which recommended the major sell-off and revamping of the NDS.

Mikesell, Raymond, Nonfuel Minerals: Foreign Dependence and National Security, University of Michigan Press, Ann Arbor, MI, 1987, 256 pages. A review of world economic issues regarding mineral production and supply. Includes review of domestic mining issues, to include, capacity, regulation, etc.

Morgan, John D, The Domestic Mining Industry of the United States in World War II, Pennsylvania State College, School of Mineral Industries, Government Printing Office, Washington, D.C., 1949, 499 pages. Major re-cap

of the mobilization of the U.S. domestic mining industry, includes analysis of problem areas and recommendations for the future.

United States Military Academy, "Industrial Capacity and Defense Planning" (Senior Conference Final Report), 4-6 June, 1981, 133 pages. A collection of point papers and discussion items from a conference regarding the ability of the U.S. industrial base to surge and mobilize.

United States Federal Emergency Management Agency, "The Stockpile Report to the Congress," August 1987 and January 1988, Washington, D.C., 65 and 85 pages, respectively. Biannual report required to be submitted to Congress regarding current NDS issues, sales, transfers, etc.

United States General Accounting Office, "National Defense Stockpile: National Security Council Study Inadequate to Set Stockpile Goals," May 1987, Washington, D.C., 43 pages. Unclassified version of GAO report criticizing the NSC proposal to reduce the NDS. Includes a breakout by agency of key arguments for and against NDS reduction.

Weston, Rae, Strategic Materials, Rowman and Allanheld, Totowa, NJ, 1984, 186 pages. Overview of strategic minerals issues, concentrating on the various options to ensure supply, stockpiling, substitution, etc.

THE STRATEGIC PETROLEUM RESERVE: PLANNING FOR PETROLEUM SECURITY

Ted Guillory

I. BACKGROUND

In expressing their displeasure with the United States for its support of Israel in the 1973 Yom Kippur War, the Arab nations imposed the 1973-74 oil embargo. For the first time in history, oil was used as a weapon in attempting to gain political concessions. This opportunity was made possible to the Arabs because of the U.S. substantial dependence upon Middle-Eastern oil.[1] At that time, approximately 49.6 percent of the U.S. total imports of oil came from this region making up slightly over 17 percent of the oil consumed in this country.[2] In view of the U.S. demand levels for petroleum, dependence upon foreign oil was inescapable; however, the reliance upon a single region for the greater portion of those imports had the adverse effect of making the U.S. vulnerable to the Arab oil disruption.[3]

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[1]The Strategic Petroleum Reserve: An Overview of Its Development and Use in the Event of an Oil Supply Disruption (GAO/RCED-85-134, September 30, 1985), 4.

[2]The World Almanac and Book of Facts, 1988 ed., s.v., "Petroleum."

[3]Report of the National Petroleum Council's Committee on Emergency Preparedness for Interruption of Petroleum Imports into the United States, by C.C. Garvin, Jr. Chairman

As a result of the Arabs attempted blackmail, the 1973-74 oil embargo had a profound impact upon the United States' economic interest. Not only did the U.S. experience higher inflation and balance of payment problems, but it is estimated that between 35 to 45 billion dollars in GNP was lost and more than 500,000 jobs disappeared.[4] If there was anything positive to be derived from the embargo, it was that it brought into focus questions about the future vulnerability of the U.S. economy to Arab oil.

In response to the demonstrated vulnerability of the U.S. economy to Middle-Eastern oil, the Congress, in 1975, passed the Energy Policy and Conservation Act (EPCA). In addition to calling for other conservation measures, the EPCA called for the establishment of the Strategic Petroleum Reserve (SPR). The SPR was intended to be a ready source of oil in the event of a future embargo.[5] The objectives of the SPR were threefold:

- To reduce the anticipated economic effect of another oil supply disruption,
- To reduce vulnerability to supply disruption,

(Washington, D.C.: Government Printing Office, 1981), 1.

[4]The Strategic Petroleum Reserve: An Overview of its Development and Use in the Event of an Oil Supply Disruption, 4.

[5]The Strategic Petroleum Reserve: An Overview of its Development and Use in the Event of an Oil Supply Disruption, 4.

- To help the U.S. meet its commitment as a member of the International Energy Agency, of maintaining a reserve equal to 90 days of the previous years net oil imports.[6]

In planning for the accomplishment of these objectives, a three phase plan was initiated. Phase I called for the storage of about 260 million barrels of oil. It encompassed the acquisition and modifying of caverns for oil storage in Southeastern Texas and Southwestern Louisiana. Phase II, which began in 1979, involved creating new caverns at three of the original Phase I sites. These additional caverns would increase the SPR's capacity to approximately 550 million barrels. Phase III, which began in 1982 and was originally scheduled for completion in 1990, involves creating additional capacity to the implementation level of 750-million barrels by adding additional caverns to three existing storage sites and developing a new site in Southeastern Texas.[7]

The SPR was a major undertaking by the U.S. government in reducing its vulnerability to future oil supply disruption. However, when one compares the program's accomplishments against its stated objectives and plans, the SPR can be judged as being only moderately successful.

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[6]The Strategic Petroleum Reserve: An Overview of its Development and Use in the Event of an Oil Supply Disruption, 4.

[7]The Strategic Petroleum Reserve: An Overview of its Development and Use in the Event of an Oil Supply Disruption, 7.

II. MANAGEMENT SYSTEM

The Executive Department is charged with the overall responsibility for planning and managing the SPR. Before the establishment of the Department of Energy (DOE), in 1977, the Federal Energy Administration assumed these functions. Since that time, the Deputy Assistant Secretary of Energy for the SPR has been responsible for the performance of these duties. With the exception of the Defense Fuel Supply Center (DFSC) purchasing the oil for the SPR, the SPR is autonomous of any other government department.

As shown in Figure 1, the SPR is organized along the lines of the typical governmental centralized system. Although it appears that the President holds exclusive authority over the SPR, the Congress, because of its control over the nation's purse, can exert just as much influence as the President upon the development and operations of the SPR.

Under the Deputy Assistant Secretary's guidance, management for the SPR has been divided into a Program Office and a Project Office. The Program Office has cognizances over program management, planning, and budgeting, while the Project Office is concerned with the day-to-day operations of the SPR.[8]

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[8]The Strategic Petroleum Reserve: An Overview of its Development and Use in the Event of an Oil Supply Disruption, 12.

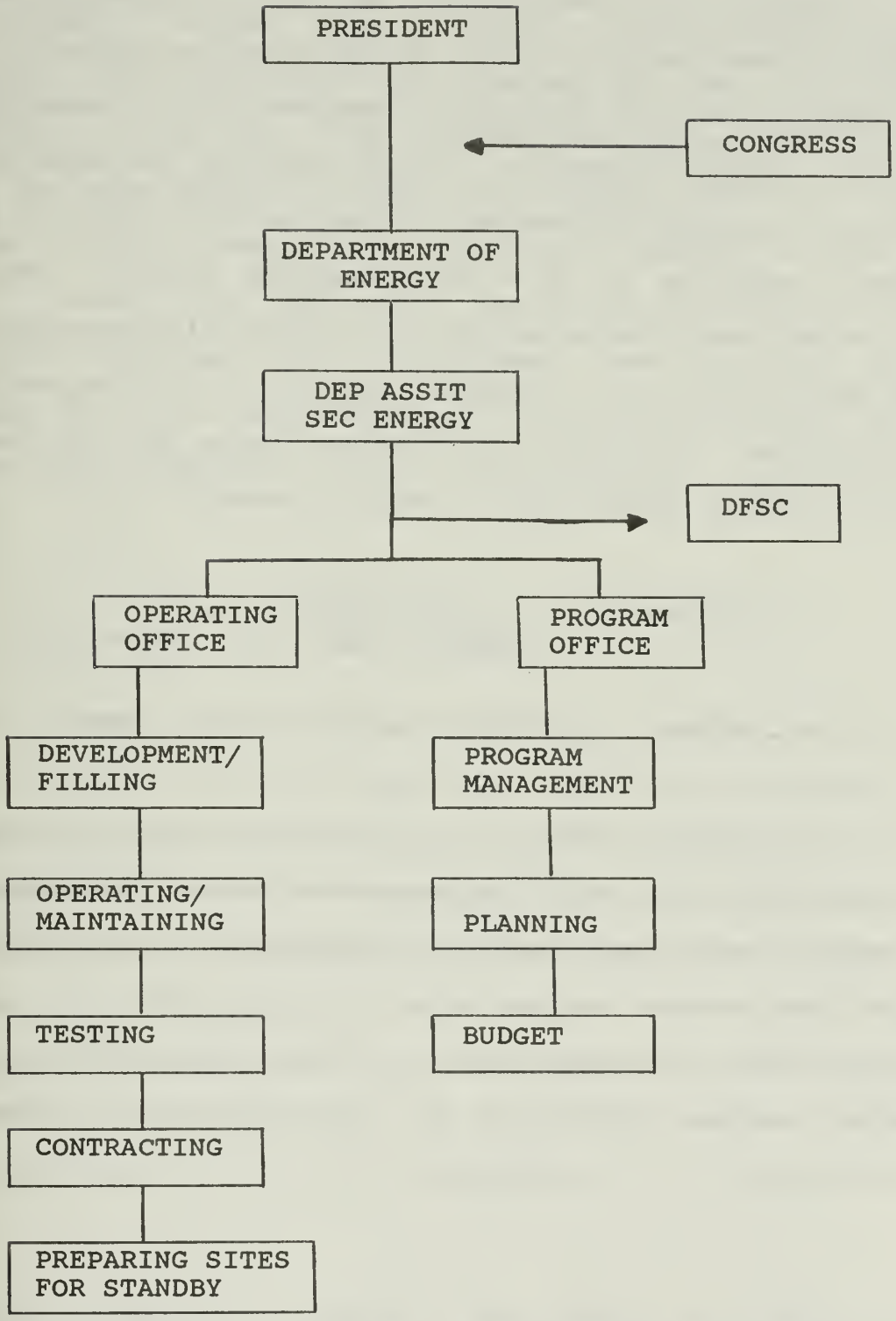

Figure 1. SPR Organization

Perhaps not intentionally, the initial planning for the SPR followed Ascher's model as depicted in Figure 2.[9] The United States' interest was to decrease its vulnerability to an oil supply disruption. In stating this interest at this level of generality instead of just focusing upon the Middle East, planning is of a more enduring nature. That is, interest described at a high level generality provides for a strategy that will encompass other potential sources of oil disruption. Moreover, an interest stated at this level is more readily agreed upon by decision makers.

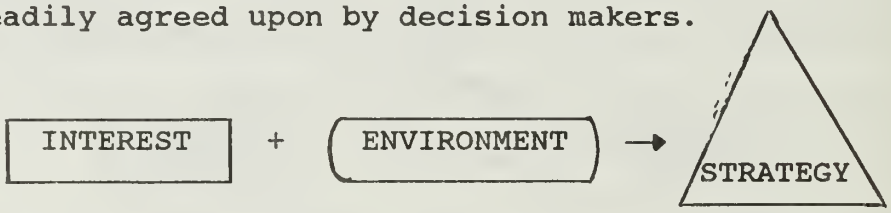

Figure 2. SPR's Strategic Planning Model[10]

It appears that the only environment considered in formulating the SPR's strategy was one of instability of supply. More specifically, as the demand for oil increases, the U.S. would become more vulnerable to an embargo. Considering the impact of the 73-74 oil embargo upon the U.S. economy there was no other realistic alternative environment to be considered.

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[9]William Ascher and William H. Overholt, Strategic Planning and Forecasting (New York: A Wiley-Interscience Publication, 1983), 21-37.

[10]Ascher, Strategic Planning and Forecasting, 22.

Similarly, since only a single environment was considered, the resulting core strategy provided for the development of the SPR. The initial plan called for "the SPR to be large enough to offset the highest amount of oil imported during a consecutive three month period in 1974-75."[11] However, in 1977, as a result of increased U.S. petroleum imports, this requirement was revised and increased the SPR's ultimate size to one-million barrels and expanded the implementation plan to provide for 750 million barrels.

III. KEY ELEMENTS

Since there is no precise method of predicting the future, planning must be based upon some key assumption. Moreover, because resources are limited and because any long-range plan must be executed during a minimum of two administrations, constraints are imposed upon any governmental plan. The SPR, not being an exception, was devised and has endured in the context of the aforementioned. The following list of assumptions and constraints are what this author believes are paramount to the SPR.

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[11] The Strategic Petroleum Reserve: An Overview of its Development and Use in the Event of an Oil Supply Disruption, 12.

A. ASSUMPTIONS

The major assumption in planning for the SPR was that a reserve containing a three month supply of oil with a daily drawdown rate of 3.3 million barrels per day would be enough to offset approximately 45 percent of the then projected 1985 import rate of 7.5 million barrels per day. With this assumption being central to the planning process, a number of sub-assumptions can be drawn.

- Based on the initial SPR size, it is obvious that the planners assumed that any future embargo would be of a short duration.
- It was assumed that during a disruption, oil could be withdrawn from the reserve, sold, and processed before prices would start to rise.
- In a similar manner, it is assumed that oil companies who purchase SPR oil would expeditiously process the oil and place it on the market before prices rise.

B. CONSTRAINTS

- It is estimated that the total cost of the SPR would be approximately 45 billion dollars. The Reagan Administration has viewed the SPR's funding as a good place for reductions. During these times of austere budgeting, one can only expect that further reductions will be attempted.
- The U.S. must be cautious in its purchases of oil for the SPR as to not to place pressure on the oil market that could result in higher prices.
- Currently, the U.S. is filling the reserve at a rate of 75,000 barrels per day. If this continues it will take until 1995 before the reserve reaches the 750 million barrel implementation level.
- The SPR is supposed to have the capability of a drawdown of 3.3 million barrels of oil per day during an oil disruption. However, no test of the SPR's facilities has been conducted to determine if this is feasible.

- An unforeseeable constraint upon the SPR accomplishing its objectives during a time of an oil disruption might be that of a delayed Presidential election in invoking a drawdown. The President's failure to take early action could result "from fear of increasing the public anxiety about the shortage."[12] A situation as such would lead to panic buying thereby bidding up prices and defeating one of the prime objectives of the SPR.

IV. ANALYSIS OF THE SPR PROBLEM

The very idea of a department other than defense developing a forward looking strategy can be considered a success. Too often Congress has attempted to legislate a strategy as a means of doing what is politically expedient and when the pressure for action subsides these plans are shelved and replaced with more pressing issues. However, the development of the SPR has been an ongoing program since its inception in 1975. Although the SPR has been consistent, because of the program's shortsightedness and inability to accomplish its stated objectives and plans in a timely manner, the SPR can at best be described as being only moderately successful.

Planning the ultimate size of the SPR is the most glaring example of the program's shortsightedness. The initial SPR plan called for the reserve to be large enough to contain a three-month supply of the total U.S. net imports. While it is highly unlikely that there would be a

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[12] Oil Reserves: An Analysis of Cost--Past, Present, and Future (GAO/RCED-87-204FS, September 1987), 19.

total embargo against the U.S., it was believed that a reserve of this magnitude could offset some of the effects of an embargo from any supplier of U.S. oil. It is estimated that the SPR contained 534 million barrels at the end of fiscal year 1987.[13] With the U.S. net total per day imports estimated to be 5,289,000 barrels, the U.S. has a 100 day supply of imported oil in reserve. Moreover, considering that the U.S. imports approximately 1,148,000 barrels of oil per day from the Arab members of the Organization of Petroleum Exporting Countries (OPEC), the 1987 SPR oil level contains a 465 day supply.[14] Superficially, the current levels in the reserve appear quite adequate for U.S. purposes. However, one can not determine the adequacy of the SPR solely in terms of only U.S. needs.

> After the 1973 oil embargo, most of the Western European countries along with the United States and Japan, in effect, linked their oil markets together into a single oil market by signing an international sharing agreement. According to this agreement, should any one signatory be denied access to the world oil markets, the other signatories will share a portion of their own oil reserves.[15]

Assistant Secretary of State Richard Murphy testified before the Senate Foreign Relations Committee that 46% of Western

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[13]Oil Reserves: An Analysis of Cost--Past, Present, and Future, 6.

[14]The World Almanac and Book of Facts, 1988 ed., s.v., "Petroleum."

[15]U.S. Congress, House, Committee on Armed Services, National Security Policy Implications of United States Operations in the Persian Gulf, Report of the Defense Policy Panel and the Investigations Subcommittee, Committee Print No. 9 100th Cong., 1st Sess., 1987, pp. 16-17.

European, 60% of Japanese, and 15% of U.S. oil imports came from the Persian Gulf in 1986.[16] If the Arab members of OPEC were to invoke an embargo against the signatories of the aforementioned sharing agreement, the U.S. would ultimately be asked to draw upon its SPR to aid its allies. As a result, the potential domestic strife and international friction which could arise from such a situation suggest that the current size of the SPR is inadequate to handle these contingencies.

As previously mentioned, the current fill rate for the SPR is 75,000 barrels per day. If this fill rate continues, it will 1995 before the implementation level of 750 million barrels is obtained. In addition, no plans have been made for developing the storage capacity for the final 250 million authorized in 1977. Although bureaucratic red tape contributed to many of the delays, taking 20 years to complete two-thirds of a project gives the SPR less than satisfactory marks in managing the plan.

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[16]Richard W. Murphy, "Persian Gulf: Stakes and Risks," Current Policy No. 963, U.S. Department of State, pp. 2-3. (Testimony of Assistant Secretary of State Murphy before the Senate Foreign Relations Committee on May 29, 1987.)

ANNOTATED BIBLIOGRAPHY

Oil Reserves: An Analysis of Cost--Past, Present, and Future, GAO/RCED-87-204FX, September 1987.

This fact sheet was prepared to address questions raised by Senator Ted Stevens regarding cost of the SPR.

Report of the National Petroleum Council's Committee on Emergency Preparedness for Interruption of Petroleum Imports into the United States, by C.C. Garvin, Jr., Chairman, Washington, D.C.: Government Printing Office, 1981.

This report was prepared at the request of Deputy Secretary of Energy to study certain issues bearing on emergency preparedness in the event of an oil disruption.

The Strategic Petroleum Reserve: An Overview of its Development and Use in the Event of an Oil Supply Disruption, GAO/RCED-85-134, September 30, 1985.

This report summarizes the development of the SPR from its inception through 1985.

The World Almanac and Book Facts, 1988 ed., s.v., "Petroleum."

Ascher, William and William H. Overholt, Strategic Planning and Forecasting, New York: A Wiley-Interscience Publication, 1983.

This text is the novice strategic planner's cookbook.

U.S. Congress, House, Committee on Armed Services, National Security Policy Implications of United States Operations in the Persian Gulf, Report of the Defense Policy Panel and the Investigations Subcommittee, Committee Print No. 9, 100th Cong., 1st Sess., 1987.

This report discusses implications of U.S. Persian Gulf operations and the impact of oil from this region upon the Western economies.

Murphy, Richard W., "Persian Gulf: Stakes and Risks," Current Policy No. 963, U.S. Department of State, pp. 2-3. Testimony of Assistant Secretary of State Murphy before the Senate Foreign Relations Committee on May 29, 1987.

NASA IN THE 1960S: MANAGEMENT SUCCESS, PLANNING FAILURE

LT David A. Hildebrandt

The National Aeronautics and Space Administration (NASA) in the 1960s, among other things, was a good example of a management system well-suited to the tasks at hand. During this period, the agency overcame tremendous technological obstacles and successfully integrated vast numbers of subsystems into one system designed to accomplish one ambitious goal--to put a man on the moon and return him to earth. The agency's ability to achieve this only eight years after the goal was announced by President John F. Kennedy must be attributed, to a large degree, to the flexible system of management created by NASA. NASA's management system imposed a penalty, however, on its ability to chart a course into the future. This paper explores the impact of NASA's decentralized management structure on its ability to conduct long-range planning. The period examined is 1961-1968, the height of the Apollo effort.

The circumstances surrounding the birth of NASA determined the agency's identity for its first decade. NASA was born out of the National Aeronautics and Space Act of 1958, which was a direct response to Sputnik I in 1957. The pride of the United States had been offended by having been beaten into space, and there were fears of falling irretrievably

behind in the "space race." The Soviet advantage in space was viewed by many as a serious threat to U.S. national security. A clamor arose among the public and in Congress to do something in space, and quickly. [Ref. 1:pp. 14-20]

The Eisenhower Administration responded rapidly, but its proposed legislation did not meet with the full approval of some defense-minded Congressmen and Senators. In particular, Eisenhower's intent to place the nation's new space agency firmly in civilian hands led to concerns that he was being too cavalier with the security of the United States [Ref. 1:pp. 19-20]. Many felt that the leadership of the group which would form the nucleus of the new space agency, the National Advisory Committee for Aeronautics, was too conservative to lead the nation in competition in space with the Soviet Union [Ref. 1:p. 19]. Eisenhower's wishes prevailed for the most part, however, and the Act entrusted the U.S. space effort, with the exception of matters directly related to weapons development or military operations, to the civilian-headed NASA [Ref. 2:p. 13].

The early years of NASA (1958-1961) were characterized by disagreement between the Executive Branch and Congress over the level of effort the U.S. should exert in space. NASA's first Ten-Year Plan was submitted in 1960; the President attacked it as too expensive, the Congress viewed it as not ambitious enough [Ref. 1:pp. 36-37]. Until the end of Eisenhower's term in January 1961, the Congress

appeared anxious to pour money into the space effort; but the President, more concerned about the nation's finances and possessing more accurate information on Soviet capabilities due to U-2 spyplane information, refused to go along.

The political climate was ripe for a new President, John F. Kennedy, to take charge in leading the nation into space. Three months after his inauguration, Kennedy tasked Vice President Lyndon Johnson with conducting a complete survey of the U.S. space program. At the top of Kennedy's list of questions was the following:

> Do we have a chance of beating the Soviets by putting a laboratory in space, or by a trip around the moon, or by a rocket to land on the moon, or by a rocket to go to the moon and back with a man? Is there any other space program which promises dramatic results in which we could win? [Ref. 1:p. 138]

The goal reflected in this note--"beat the Soviets in space" --turned into the Apollo program. The lunar landing mission and manned spaceflight programs to prepare for it almost immediately became "the dominant activity within the agency [NASA]." [Ref. 3:p. 36] This received nearly unanimous support from the President (obviously), Congress, and the American people. NASA had been given a mandate to put a man on the moon.

NASA's management structure in the 1960s was never stable for very long. This was due in large part to a conscious attempt on the part of James E. Webb, NASA Administration from 1961 to 1968, to maintain a state of "desired

disequilibrium." [Ref. 4:p. 6] The goal was "to avoid those concepts and practices that would result in so much organizational stability that maneuverability would be lost." [Ref. 4:p. 6] As a result, any attempt to describe NASA over a period of years either must be very general, or very lengthy. The following discussion focuses on the broad characteristics that remained stable for much of the 1960s.

After 1963, NASA settled into a structure which did not change very much for the remainder of the decade. It was highly decentralized, with most of the responsibility for day-to-day operations resting with the field centers [Ref. 3:p. 43]. Managing a project, NASA's "output," was the responsibility of a lead center; since a project might include several subsystems which could be "parceled out" to other centers, the lead center for a project had broad powers to coordinate with other centers without going through NASA Headquarters [Ref. 3:pp. 43-45].

It was the responsibility of the program offices--Manned Space Flight, Space Sciences and Applications, and Advanced Research and Technology--and the rest of NASA Headquarters to ensure the field centers did not abuse their autonomy and spin out of control pursuing their individual agendas. This was accomplished by requiring adherence to a set of uniform organizational procedures; controlling resource allocation; reviewing the actions, primarily after the fact, of the centers; and maintaining checks and balances to prevent one

program office from becoming totally predominant [Ref. 3:pp. 62-64]. Administrator Webb's philosophy, which he tried to imbue throughout the agency, was "management by exception," which "means that the higher levels of management were called on for decisions 'only when something extraordinary occurred in the process of executing approved projects'." [Ref. 3:p. 63]

Given this decentralized management structure and the disparity among the functions and sizes of the program offices, it is not surprising that each devised its own somewhat unique approach to planning. Nevertheless, there were some similarities. Most of the planning conducted under the auspices of the program offices can be considered "intermediate-range"--programs with lead times of from five to seven years. This process can be summarized as formulating proposals for new projects; reviewing, approving, and devoting resources to implement proposals; monitoring progress; and readjusting goals and resource allocation [Ref. 3:p. 142]. The tool used by senior management to control this was the Phased Project Planning (PPP) system, which was formally instituted by policy directive in 1965 to ratify what was essentially already being done [Ref. 3:p. 158]. The purpose of PPP was to force a rational evaluation of a project, comparing expected costs to expected benefits, at distinct phases in a project's life: advanced studies,

project definition, project design, and project development/ operations [Ref. 3:pp. 158-159]. A Project Approval Document (PAD), signed by the NASA Administrator, was required before work could begin on any given phase of a project; in other words, each phase had its own PAD. PADs were reviewed annually and updated as necessary [Ref. 3:p. 161].

In contrast to intermediate-range planning, which was delegated to the program offices subject to approval by the Administrator, NASA's long-range planning at the beginning of the 1960s was nominally the responsibility of the Office of Plans and Program Evaluation, reporting directly to the Administrator. This Office was abolished in 1963, being replaced by the Policy Planning Board and the Planning Review Panel, the former reporting to the Administrator and the latter to the Associate Administrator. The Policy Planning Board was abolished in 1965 [Ref. 3:p. 46]; after 1965, agency-wide long-range planning was primarily the domain of ad hoc study groups and advisory panels consisting of representatives from the outside scientific community [Ref. 3:pp. 242-262]. There was never a formal link between the long-range plan and PPP or budgeting [Ref. 3:p. 241].

NASA operated under three constraints that affected its ability to plan, particularly for the long term. The first constraint was the limit on civil service salaries. The importance of this constraint is exemplified by the constant

efforts of top NASA management to persuade the Civil Service Commission to increase the number of positions in NASA that were subject to less stringent salary limits (the so-called "excepted" and "nonquota" positions). These efforts met with less than total success, and NASA's ability to compete with civilian salaries often was in the hands of Congress [Ref. 3:pp. 110-115]. While this constraint never crippled NASA, policymakers within the agency had to keep in mind that NASA could not compete for scientific and engineering talent on the basis of salary; it was necessary to provide other types of rewards to acquire and keep good people. This, of course, had a deep effect on the agency's planning.

A second, but related, constraint was the nature of NASA's workforce. Between one-third and two-fifths of NASA employees were scientists or engineers [Ref. 3:p. 115]; NASA's engineers, in particular, were among the best in the country [Ref. 3:p. 138]. While this was obviously an advantage when it came to getting a job done, it introduced some complications into the planning process. The typical NASA scientist or engineer got his or her job satisfaction from working on projects he or she found interesting; and as professionals at or near the cutting edge of their fields, they could have very definite ideas on what those projects ought to be. For its own reasons, NASA felt it necessary to be able to attract some of the best and the brightest; and in order to do so, it had to guarantee a certain amount of

scientific freedom to pursue personal interests. A long-range plan could be seen as an impediment to freedom of scientific inquiry.

The third constraint was the demands of the Apollo schedule. All of the field centers and all of the program offices would play a role in this huge project [Ref. 3:p. 36], and it was necessary to preserve a harmonious relationship among them so they could work together with a minimum of friction. One of Administrator Webb's concerns was that a fixed long-range plan inevitably would alienate some of the program offices and field centers, all of whom had their own good ideas for where the U.S. should be going in space [Ref. 3:p. 242]. This would impact negatively on the agency's ability to complete the Apollo project on time.

Apollo was NASA's greatest management success, but it also was a cause of some problems that continued to affect the agency into the 1970s. THe success is analyzed first.

The decentralized system of management on which NASA ultimately settled in 1963 was actually a return to a structure similar to the one which had existed prior to November 1961. Before November 1961 and after November 1963, each of the field centers was subordinate to one of the program offices; for example, after the November 1963 reorganization, the George C. Marshall Space Flight Center (Alabama), the Manned Spacecraft Center (Houston), and the Launch Operations Center (Cape Canaveral) reported to the head of

the Manned Space Flight program office. Between November 1961 and November 1963, however, the field centers reported directly to the Associate Administrator, NASA's "general manager" for day-to-day operations [Ref. 3:p. 36]. This was a much more centralized arrangement, partially intended to gain firmer control over the field center directors [Ref. 3:p. 36].

Any reorganization inevitably causes some degree of initial confusion, and NASA's in 1961 was no exception. Ten months after, in September 1962, there was still real confusion in the management ranks; the center directors and the program office heads in particular were unsure of their roles [Ref. 3:p. 38]. In other circumstances, NASA may have stayed with the system for a while longer to let people become accustomed to it; there was, however, Apollo to keep on track.

A harbinger of the eventual return to the pre-November 1961 structure was the creation in October 1962 of the position of Deputy Associate Administrator for Manned Space Flight Centers; more importantly, this title was assigned to D. Brainerd Holmes, who retained his position as Director of the Manned Space Flight Program Office. This effectively removed three field centers from the Associate Administrator's span of control [Ref. 2:p. 256], and placed them under a program director. Within a year of centralization, decentralization had reappeared in the management of the manned

space flight effort because of a bottleneck at the Associate Administrator level and the failure of informal coordination at lower levels [Ref. 2:p. 256]. In NOvember 1963, the entire agency was reorganized to return to a structure similar to the pre-November 1961 structure.

It is fair to say that the November 1961 reorganization was never given a chance to work. The Associate Administrator, Robert Seamans, Jr., even claimed after the fact that it was never intended to be permanent [Ref. 3:p. 42]. The factors leading to the rapid reversal--confusion over formal lines of authority, the breakdown in informal cooperation, and the pressure of the Apollo deadline--are most interesting, however, Apparently, they caused NASA to revert to the management system it knew best and was comfortable with--the field centers subordinate to the program offices, which reported to the Associate Administrator. This was the structure that NASA used to succeed in putting a man on the moon. Whether the centralized system could have produced the same results had it been given more time is a difficult question to answer. Informal lines of communication have always played a major role in NASA; the success of the centralized system would have depended in part on whether the informal system could have been rebuilt.

While it may not be correct to say that NASA could not have succeeded in putting a man on the moon without decentralized management, it is definitely correct to say that

NASA's decentralized management did not detract from the achievement of that goal. The return to decentralization in 1963 appears to be, in large part, the path of least resistance following an experiment in centralization that could not be given much time to work. The Apollo project may not have demanded decentralized management; but given the organizational culture of NASA, the Apollo project provided the impetus for a return to decentralization when central control did not succeed.

As mentioned above, the field centers were responsible for managing projects. The role of NASA Headquarters was to allocate resources, to monitor progress, and to assess the results. In order to perform these functions, Headquarters required information and independent technical expertise. This system worked well in managing the Apollo project, with one exception--the Apollo 204 fire in 1967, which claimed the lives of three astronauts. The system worked well because: (a) the goal was clearly identified, (b) the formal management structure was fairly flexible, and (c) the network of informal liaison and cooperation recovered following the November 1963 reorganization.

As a result of this system, NASA Headquarters reacted to initiatives from the field rather than being an initiator in its own right. This was not a problem in the manned space flight effort, because the goal was unambiguous--put a man on the moon. Proposals from the field centers in this area

were aimed at how best to achieve that goal. In the other program areas, Space Sciences and Applications and Advanced Research and Technology, there were no agreed upon specific goals. These programs had little focus, due in large part to their very nature; but Headquarters had no mechanism to enforce a unifying mission within these program offices, not did it seem very interested in doing so, in part to preserve freedom of scientific inquiry and to avoid internal frictions. The same problems arose in attempting to formulate goals for the Office of Manned Space Flight after Apollo--the agency could not come to internal agreement [Ref. 3:p. 244].

The failure of NASA's long-range planning during this period, then, was due in part to the lack of a formal mechanism for translating long-range plans into intermediate-range programs. In practical terms, this meant that the output of the Office of Plans and Program Evaluation and its successors carried very little weight in the formulation of Project Approval Documents. The long-range planners reported to the Administrator, but the individuals who generally initiated proposals for new projects were at the field centers; seldom did the twain meet.

The absence of a formal mechanism for translating plans into programs is merely a symptom, however, of Administrator Webb's disbelief in long-range planning. As one source states:

> He would not commit himself publicly to new programs where costs were unpredictable, congressional approval uncertain, the likelihood of changes ever-present, and the program offices themselves deeply divided over long-range plans. [Ref. 3:p. 242]

One could argue that the first three of these factors are inherent in any attempt to perform long-range planning; Webb's real problem was his inability or unwillingness to enforce a unifying vision on the different program offices.

NASA's fundamental problem in long-range planning in the 1960s was identifying goals. In 1965, "there was almost no agreement within NASA as to what should follow the lunar landing" [Ref. 3:p. 243], which at that point was only four years away. Paradoxically, Apollo, a program thrust upon NASA by a visionary President and an eager Congress, had united the agency; the attempt to plan beyond Apollo threatened to divide it. The agency had become a bureaucracy, and plans for the future inevitably threatened certain bureaucratic interests. Manned Space Flight, the predominant interest within the agency, could be tolerated so long as a public consensus existed in support of Apollo; afterwards, however, it was argued by some that it was time to concentrate on scientific research in space, which could be accomplished just as well or better with unmanned probes. This would imply a drastic shift in the balance of power among the program offices, with all the resistance that would create. In this way, articulating long-term goals for the future threatened bureaucratic interests in the present.

The real long-term planning in NASA, therefore, was done by the field centers and the occasional input from outside task forces and panels. In the case of the field centers, the most important contribution to planning were advanced studies; by definition these pertained to

> ...flight missions beyond those currently approved or studies of as yet unapproved spacecraft, launch vehicle, or aircraft systems that may lead toward such future flight missions or studies leading to significant changes on an already approved configuration of spacecraft and launch vehicles. [Ref. 3:p. 147]

This broad definition could encompass just about anything. As in other matters, NASA Headquarters exercised control over these studies with PADs; as in other matters, top management passed judgment on the initiative of others, but did not exercise initiative itself. Furthermore, these studies, which were intended to lay the groundwork for future projects, were politically sensitive; an approved study could be misinterpreted in Congress as an approved program, for example [Ref. 3:p. 148]. Therefore, NASA's ability to study future alternatives was impeded by politics.

Many outside advisory groups existed upon which NASA could draw for advice, but there was no formal requirement to do so. The major problem in this area was that the advisory process "was unpatterned and unsystematic." [Ref. 3:p. 250] Often, the contribution of outside scientists consisted of demanding more control over NASA's science

policy, which Webb was not willing to surrender [Ref. 3:p. 250].

NASA was not unique in having internal fiefdoms whose interests could be threatened by long-range plans. A unique confluence of circumstances conspired, however, to prevent NASA from overcoming its internal divisions to chart its own course into the future. The demands of the Apollo schedule prevented NASA from sticking to an experimental centralized structure and forced it to return to a more familiar decentralized system in 1963. It was necessary to preserve harmonious relations among the program offices and field centers, since they all would have to cooperate on Apollo; this persuaded Webb to avoid troublesome issues, and the long-term planning problem was swept under the rug. Contributing to this was a perceived need to retain top-notch engineers and scientists, without the ability to pay them the going salary in industry; to compensate for this, it was considered necessary to maintain some freedom of individual scientific inquiry, and a long-range plan was perceived to detract from that.

James Webb did not believe in long-range planning for NASA, because NASA's future would be determined by political considerations. He may have been right, but not for any of the reasons mentioned above. One of the first steps in any model of strategic planning is to identify characteristics and trends in the environment; but NASA was in the position

in the 1960s that too little was known about space to do that. Without a definition of the environment, it is impossible to conduct strategic planning. NASA's business in the 1960s was exploration to define the environment in space, so the next generation could plan the exploitation of space. In such an endeavor, the choice of goals must be a product of politics, because no rational weighing of cost versus benefit is possible--both are unknowns.

LIST OF REFERENCES/ANNOTATED BIBLIOGRAPHY

1. Hirsch, Richard and Trento, John Joseph, The National Aeronautics and Space Administration, Praeger, New York, 1973. General history of the agency. Good background on its predecessor, the National Advisory Committee on Aeronautics, and on the National Space Act of 1958. Good place to start for the reader who knows very little about NASA.

2. Rosholt, Robert L., An Administrative History of NASA, 1958-1963. National Aeronautics and Space Administration, Washington, D.C., 1966. Well-written, detailed account of NASA's early planning and management systems. Contains reprint of the National Aeronautics and Space Act, describes Eisenhower Administration proposal that eventually turned into the Act.

3. Levine, Arnold S., Managing NASA in the Apollo Era, National Aeronautics and Space Administration, Washington, D.C., 1982. Contains chapters on the functions of NASA Headquarters, the NASA acquisition process, manpower policy, program planning and authorization, NASA-DOD relations, and NASA long-range planning. Covers in detail the period 1961-1968.

4. Webb, James E., Space Age Management: The Large-Scale Approach, McGraw-Hill, New York, 1969. No index. A few pearls, but hard work digging them out. Mostly broad generalities, but good for a few Webb quotes.

5. Chapman, Richard L., Project Management in NASA: The System and the Men, National Aeronautics and Space Administration, Washington, D.C., 1973. Good discussion of how the typical project in the Office of Space Sciences and Applications and the Office of Advanced Research and Technology was managed. Chapter on the evolution of an example project. Less valuable section on the personal attributes of project and program managers.

THE SUPERSONIC TRANSPORT

LT Sandra Nichols Ellis

I. BACKGROUND

The SuperSonic Transport (SST) debate spanned more than a decade. The momentum driving the project was primarily centered in the aerospace industry and reportedly in 1958, both Douglas and Lockheed were working on designs. In 1959, an Air Force sponsored study on the possibility of supersonic flight, seemed to capture the imagination of the industry and encouraged further investigation. [Ref. 1:p. 7]

In 1960 Elwood Quesada, the director of the Federal Aviation Administration (FAA), strongly advocated an SST project. He attempted to organize an official SST program for Eisenhower's signature. He was unsuccessful and it was left to the Kennedy Administration in 1961 to get the program started. [Ref. 1:pp. 13-15]

In 1960, Kennedy's appointee as Director of the FAA, Najeeb Halaby, an ardent supporter of supersonic flight, lobbied diligently with industry and government alike to encourage their interest and continuously brought up the subject with President Kennedy. In 1961 Kennedy came out in

support of the project and set aside government funds for research and development. [Ref. 1:pp. 21-22]

Several government agencies were tasked with feasibility studies. Among these were the Office of Science and Technology, and the Commerce Department. Their findings were in favor of an SST program. In 1963, Kennedy formally announced the SST program. His death in November of 1963 was a grave setback. [Ref. 1:p. 27]

On April 1, 1964, President Johnson created the President's Advisory Council on the SST (PAC). This council was to make further studies and advise the President whether he should continue with the program. The council was chaired by the Secretary of Defense, Robert McNamara, and included the Departments of Commerce and Treasury, National Aeronautics and Space Administration (NASA), FAA, the Director of the Central Intelligence Agency, and two advisors, Stanley Osborne, an industrialist and Eugene Black, an economist. [Ref. 1:p. 72]

McNamara decided he could only make a responsible report to the President after PAC had completed almost three years of profit analysis. At the end of this period, after numerous economic, feasibility, and financial studies, the fourth and final report of the council was submitted to the President on 22 December, 1966. It stated that the American SST project was technically and economically feasible. However, the PAC failed to make any concrete recommendation for

continuing the SST program. After receiving the PAC report, President Johnson had his appointed director of the FAA, William McKee, make the announcement that the Boeing-General Electric design for the SST had been chosen by the FAA and that prototype construction would begin. [Ref. 1:pp. 170-179]

In 1967, due to the developing crisis in Vietnam, budget questions began to arise. Additionally, 1967 marked the founding of the organization that was to be the thorn in the SST's paw, the Citizen's League against the Sonic Boom. The rising tide of public sentiment was focused through this organization. Its founder, William Shurcliff, a physicist at Harvard, was a tireless opponent and was determined to stop the SST. [Ref. 1:p. 221]

In May of 1967, design problems began to plague Boeing, resulting in a delay until October 1978, when Boeing finally was satisfied with its fixed-wing design. [Ref. 1:pp. 181-189]

By late 1969, articles on the controversy over the sonic boom and the possible hazards to the ozone layer were prominent in the media. Nixon's decision to support the SST on 23 September 1969 acted as a catalyst to organize all the opponents against the SST. The public delivered its most resounding protest on Earth Day, April 22, 1970. The SST emerged as the major target of protest of environmental and

conservation groups across the United States. [Ref. 1:p. 281]

This upswelling prompted Congressional hearings in May. In November 1970, the Senate Appropriations Committee voted to approve funding for the SST for Fiscal Year 1971. In December Nixon again came out in support of the SST. However, intensive campaigning and astute lobbying by opponents caused the House to vote against SST funding on March 18, 1971. The Senate voted against the project on March 24, and the SST program was discontinued. [Ref. 1:pp. 322-325]

II. THE SYSTEM

The prevailing planning system at the time was the formation of committees and councils of top government officials to study proposed projects. Additionally, Presidents would assign special advisors to analyze programs, choosing people from academia and industry who specialized in the areas under study. Often the opinions of the specialists reflected the opinions of the President or other top government officials.

Though Halaby was a skilled bureaucrat and understood the politics of the government, he did not plan beyond building the transport. Additionally he felt that the project was worthwhile, no matter the cost. Therefore, when McNamara was made head of the PAC, Halaby failed to conduct analyses that satisfied the economic-minded chairman.

McNamara was only concerned with the economic aspect of the project. Therefore his planning and approval of the program was based on his analysis of the feasibility studies, financing arrangements, the market for the end product, and how the royalties and profits would be shared.

Both FAA directors, Halaby and McKee, also used the threat of the UK/French or the Soviet version of the SST being used by domestic American airlines as impetus for the American program. This, however, was not seen by McNamara as a threat. He had stated that if the Soviets built a workable, affordable SST, he would buy it. [Ref. 1:pp. 47, 53, 62]

Until the public began to earnestly protest, the government proponents of the program were not even aware of the growing tide of opposition. There were no efforts made to gain public support for the transport.

So basically there were two systems or plans for the SST program. Halaby wanted to develop the technology, build the prototype and then determine the role of the aircraft. McNamara wanted the SST to be economically feasible and saw beyond the prototype, requiring that the program be examined as if the prototype were already built.

III. KEY ASSUMPTIONS

Halaby, the FAA Administrator, was the champion of the SST. His qualifications included a law degree, and time as

a test pilot and flight instructor. He had been an aviation intelligence officer for the Department of State, as well as a foreign affairs advisor to the Department of Defense. At one time he had held the post of Deputy Assistant Secretary of Defense for National Security. His experience with Washington and politics gave him the confidence and the skills to build a firm foundation with government and industry officials. [Ref. 1:p. 104]

After his appointment as FAA Administrator in 1961, Halaby pressed for large scale research, advocated placing the SST program under FAA control, and unsuccessfully tried to develop a rapport with the Secretary of Defense McNamara. He did gain support from the NASA Administrator, and the Director of the Bureau of the Budget. Additionally Halaby established close contact with airframe and engine manufacturers in industry and requested briefings on corporate SST activities and plans. [Ref. 1:pp. 21-22, 104]

McNamara, though he gave grudging support in 1963, was not as thrilled with the potential of the SST as Halaby. His background consisted of an MBA from Harvard, and experience in corporate industry. He had a preference for detailed feasibility studies and introduced the Planning, Programming and Budgeting System (PPBS) into the government. For McNamara the SST prototype was not goal, the financial success of the end result, the working SST, was the goal, and he would not allow the program to continue and be funded

if he felt that the goal could not be reached. McNamara saw no military potential for the SST and doubted that the transport has much commercial use. [Ref. 1:pp. 51, 104]

McNamara also did not consider the public when he made any SST decisions. Though he was soon preoccupied with the Vietnam crisis, he still devoted quite a lot of time to the SST program and to the PAC commission. [Ref. 1:p. 126]

President Kennedy supported the SST project but did not give it the push nor the media coverage he gave to the NASA program. President Johnson also supported the SST, however he soon became heavily involved with the Vietnam conflict and could not devote much attention to the program.

Industry was very optimistic about the development of the SST, in public. In private the manufacturers and designers were much more reserved and skeptical. The greatest problem industry faced was the question of financing. Most of the companies felt the government should fund the project up to at least 95%, while the companies would pick up the rest of the tab. [Ref. 1:pp. 64, 128]

The public remained fairly unconcerned and unaware of the project until about 1967. At this point, the results of several sonic boom studies had been released and the response to this facet of the SST was rather negative. The birth of the Citizens League against the Sonic Boom and the eloquent opposition of the founder, William Shurcliff, focused the energy of the protests. This media and public

concern provoked Congressional hearings in 1967. However, Congress decided in favor of the project. [Ref. 1:pp. 221-222, 255-256]

IV. ANALYSIS OF THE PLAN

As stated earlier the SST program failed partly because there seemed to be two plans with different goals.

Halaby wanted to develop the technology, build the prototype and test it. He held the belief, widely accepted at the time, that technology was good and should be developed even though the expense might be great and the rewards ambiguous. He did not concern himself about the possible cost, nor did he care who paid for the program. His concerns were for the U.S. to retain its hegemony in the aerospace industry and not be forced to use foreign supersonic carriers.

Halaby failed because he lost control of the program. The responsibility for different parts of it were parceled out to advisory committees, and other government agencies.

McNamara was very concerned with the economics of the project. His demands for years of studies and detailed analyses of the results showed his priorities were not with the possible unknown benefits that could accrue from the project, but with the cost to the government, the profits, and the final use of the end product.

The greatest problems occurred because none of the conflicts were resolved. The results of the sonic boom tests were controversial, even the validity of the tests themselves were questioned. The financing issues were never resolved. Bickering was constant over who should bear the financial burden for the research and development. Additionally, no one could decide which agency should manage the program. There was doubt about the ability of the FAA to manage a program the size of the SST. The Defense Department wanted no part of the program, wishing to focus on their own supersonic aircraft that would be used for military purposes.

However, the single most important reason for the failure of the SST program was the lack of public support. None of the proponents seemed aware of the need to have the backing, confidence and faith of the American people before proceeding with major and expensive programs. Only by having this support can a country muster the resources, energy and financing needed to achieve great aims.

V. EPILOGUE

By 1974, many supporters of the SST had seen the results of the Concorde program. The oil crisis in the 70s, the financing problems, and the lack of a commercial market, convinced the SST advocates that the decision to cancel the

program had been wise. The public had apparently made the right choice.

The original SST program was born in a society that supported technological endeavors and allowed such decisions to be determined for them by a small group of advocates from industry and government. By the late 60s, however, the public had changed from a passive and trusting population to environmental and conservation activists, passionate, aggressive, and determined to have a voice in their government and a say in the priorities set by the country's leaders. [Ref. 1:pp. 328, 345]

REFERENCES AND ANNOTATED BIBLIOGRAPHY

1. Horwitch, Mel, Clipped Wings. Cambridge, the MIT Press, 1982. This book is the definitive study of the SST program, its origins, problems, and its ultimate failure. The author used primary source documents, transcripts, and interviews where possible. He also referenced the major media articles.

2. Dwiggins, Don. The SST: Here It Comes, Ready or Not. Garden City, Doubleday & Company, Inc., 1968. This book is a much earlier account of the development of the SST. The author concluded that the SST would become face and would greatly enhance air travel. Though time has proved the author wrong, it is interesting to get his view of the transport as it was still being developed and promoted. Additionally, the pictures and illustrations chronicle the evolution of SST designs.

3. U.S. Congress, Senate. Oversight Hearings on the SST. 94th Cong., 2nd sess, 1976, Serial No. 94-91. Hearings and testimony to Congress.

4. U.S. Congress, House. Review of the Secretary of Transportation's Decision on the SST Concorde. 94th Cong., 2nd sess, 1976. Hearings and testimony to Congress.

5. U.S. Congress, House. FAA Certification of the SST Concorde. 94th Cong., 1st and 2nd sess, 1976. Hearings and testimony.

APPENDIX A

Assistant Professor Jim Tritten
M & W 1010-1200 Root Hall 228

QIII AY-88
Spring

Seminar in Strategic Planning
NS 4230 (4-0)

Course Description: Advanced study in the concept and methods of long-range defense planning and analysis, particularly with respect to iterative aggregation and synthesis in the Military Departments, the Joint Chiefs of Staff, the Office of the Secretary of Defense, the Department of State, the National Security Council/White House, and the Congress. Students are expected to research and report on a major strategic issue/strategic planning process/case study which has/has a significant long-term impact. PREREQUISITE: SECRET clearance and NS 3230 or permission of Instructor.

Course Objectives: By the end of the course, the student will demonstrate that he comprehends and can apply his knowledge of general strategic planning by an analysis of major issues in strategic planning and selected case studies. Student will demonstrate that he has mastered the differences between the terms strategic planning, strategic management, strategic nuclear, strategic non-nuclear, and strategy, and between planning for programming, war planning, and execution of plans, and between declaratory planning and real planning.

Clearance Requirement: The course is taught at the unclassified level. Certain of the case studies materials and a seminar discussions of actual war planning will involve classified material; hence a SECRET clearance is required.

Texts Purchased by Student:

(1) Zbigniew Brzezinski, Game Plan: How to Conduct the U.S.-Soviet Contest, 1986

(2) Perry Smith, Jerrold Allen, John Stewart, & F. Douglas Whitehouse, Creating Strategic Vision: Long-Range Planning for National Security, 1987

(3) William Ascher & William H. Overholt, Strategic Planning Forecasting: Political Risk and Economic Opportunity, 1983

Texts Provided by Instructor:

(1) Carl H. Builder, The Army in Strategic Planning: Who Shall Bell the Cat?, 1987

(2) Joint Staff Officer's Guide - 1986, AFSC Pub 1

(3) James L. George, Robert E. Sheridan, Francis J. West, Michael E. Sherman, Review of USN Long-Range Planning, CRM 85-69/July 1985

Appendix A

Recommended Texts Provided by Instructor (no readings assigned):

(1) National Security Strategy of the United States, January 1988

(2) Discriminate Deterrence: Report of the Commission on Integrated Long-Term Strategy, January 1988

Grade: Based upon in-class written assignments, classroom presentation and participation, written assignments, and the seminar paper.

Written Assignments: Two-page think pieces will be required throughout the course in addition to the seminar paper. These are to be original thought with no footnotes or additional research required. Occasionally papers will be required that are to be written in the classroom.

Seminar Paper: A major research paper is to be written that addresses a specific case study in successful/failed strategic planning/strategic management. The objective of the paper is to identify and describe the system used for planning and the system of execution/implementation of that plan and to then identify those elements of the planning/management system that were present and resulted in success/failure. The papers must analyze and not merely describe; i.e. a descriptive paper will be returned as incomplete. The annotated bibliography will be considered in the grade assigned to the paper. Papers should adhere to the following outline:

I - Background description of the international or national context of events at the time, what was it that was being planned, how did the planning process end (with a published study/execution of plan etc.), and if implemented, was the strategic management effort generally successful (or not). (2 pages maximum)

II - Description of the strategic planning/management system. This should not be an especially detailed description of the substance of the issues being planned but rather a description of the system for planning. (3 pages maximum).

III - Key assumptions made by key personnel or in the plan and constraints on the planning/management system. Were there common goals and objectives that all parties agreed to? (3 pages maximum).

IV - Analysis of the key elements of the plan/execution system that were crucial to success/failure. (Open ended size)

V - Annotated Bibliography (Open ended size)

Due NLT Friday 17 June 1988

Class Schedule

Monday 28 March - Course Introduction
-Course overview and requirements presented by instructor
-Seminar paper topics discussed
-Instructor provided texts passed out
-Case Study in Strategic Planning: videotape Beyond War
-In class exercise: outline of Beyond War strategic plan (handwritten answers to the following questions to be turned in at end of class period with xerox copies returned to students to be used in at-home analysis)
(1) What is the problem?
(2) What is the goal of the Beyond War group?
(3) How does the group expect to reach their goal?
(4) What is the expected end result of Beyond War's efforts?

Wednesday 30 March - Basics of Long-range Political-Military Planning
-Readings: Smith pp. xv-22, Builder pp. 1-11, Brzezinski pp. xiii-29
-Paper due: Analysis of (compare and contrast) the political-military futures as advocated by Beyond War and Brzezinski: can we plan plan for either of these? Paper to parallel class discussion.
-Class discussion: Students will lead discussion of their viewing of the Beyond War videotape and Brzezinski relative to: (1) the future seen by each, (2) the methodologies used by each to identify their versions of the future, and (3) how realistic are each's strategic plan? Is the U.S. in a zero-sum or non-zero sum game with the USSR? Students/faculty from UC Santa Cruz have been invited to participate in discussion.

Monday 4 April - Methodologies for Long-range Planning & Forecasting Part I
-Readings: Smith pp. 49-92, Ascher pp. xi-93
-Class discussion: Students will lead discussion on (1) the role of the analyst in support of political-military policy makers, (2) the types of methodologies that are available to help staffs and decision-makers, and (3) elements of a basic strategy.
-Students will select their seminar research paper topics by this date

Wednesday 6 April - Methodologies for Long-range Planning & Forecasting Part II
-Readings: Ascher pp. 94-157
-Paper due: Analysis of all the types of methodologies for developing alternative futures likely to be of interest to strategic planners in the DoN/DoD with strengths and weaknesses of each method highlighted and likelihood that anyone in the DoN/DoD would pay attention to each. Paper to be in the form of a matrix. Use all methodologies found in texts.
-Class discussion: Student views of paper topic and overall efforts to reduce uncertainty and aid decision-makers.

Monday 11 April - Alternative Futures
-Readings: Brzezinski pp. 30-144
-Class discussion: Students to lead discussion on how to identify the future that we plan for. To include inability to identify all political variables, inability to describe an international system, inability to predict, and need to plan anyway. How might varying methodologies help predict?
-In class exercise: students will outline a Soviet scenario for a general war or a specific campaign to be used in a war game.

Wednesday 13 April - Prescriptive Strategic Planning
-Readings: Smith pp. 93-133, Brzezinski pp. 145-250
-Class discussion: Students will lead discussion on what should American goals be in peacetime, crises, or war? Do goals derive from the threat, expected resources, or existing plans? Do we prepare for the worst/best/most likely case? Does answer vary in programming vs. war planning or declaratory vs. real planning?
-Inc lass exercise: disarmament exercise.

Monday 18 April - Descriptive DoD Strategic Planning
-Readings: Joint Staff Officer's Guide chapters 5-7, 10
-Paper due: Analysis of how likely it is that the current or expected elements in the DoD forecasting and planning process are capable of providing good advice and a system for strategic planning/management to decision-makers. Paper is not to be descriptive.
-Class discussion: Students will lead discussion on how likely is it that decision-makers are well served by the current system? DRMEC faculty have been invited to participate in the discussion.

Wednesday 20 April - Problems with Present DoD Strategic Planning
-Readings: Ascher pp. 245-261, Smith pp. 23-48, Builder pp. 12-98, Norman Bailey & Stefan Halper, "National Security for Whom?"
-Discussion: Students will lead discussion on how we can integrate the needs of the varying multi-purpose organizations within the DoD and the realities of the American political system to have an effective long-range planning process.

Monday 25 April - War Planning
-Readings: Keith A. Dunn, "The Missing Link in Conflict Termination Thought" Strategy," LTG John Cushman, "Strategic Planning in the Military," SECDEF Statement to SASC 12 Jan 87, pp. 1-3, & Allan Millett, et. al., "The Effectiveness of Military Organizations"
-Paper due: What should the major goals be for the U.S. and USSR if they engage in a major war? Each geographic area of world must be covered and prioritized.
-Class discussion: Students will lead discussion on how to decide the goals for the U.S. in a major war with the USSR and how we should choose to allocate our military resources to the varying theaters of military operations. Is war termination a zero-sum or non-zero sum game?

Wednesday 27 April - Business & Public Sector Strategic Planning
-Readings: LaRue Hosmer, "Introduction to Strategic Management," George pp. iii-iv & appendix D, Kenichi Ohmae The Mind of the Strategist pp. xi-xiii, p. 1-41, 76-88, 269-277, LTC Al Gropman "Long-range Planning," pp. 49-54, John Bryson & Robert Einsweiler, "Strategic Planning," John Bryson & William Roering, "Applying Private-Sector Strategic Planning in the Public Sector"
-Guest lecturer: Associate Professor Nancy Roberts, Department of Administrative Sciences
-Class discussion: What types of business and public sector planning concepts are applicable to the DoN/DoD and why are they applicable?

Monday 2 May - Research time for students

Wednesday 4 May - Research time for students

Monday 9 May - Student Presentations
-National Security Strategy published by White House
-Discriminate Deterrence report
-Class discussion: Two students presenting case studies will lead discussion on role of line organizations and special blue-ribbon panels in strategic planning process.

Wednesday 11 May - Student Presentations
-McNamara era and the start of PPBS in DoD
-Competitive Strategies
-Class discussion: Two students presenting case studies will lead discussion on likelihood of business models being successful within DoN/DoD in either programming or war planning.

Monday 16 May - Student Presentations
-Navy Long-range strategic planning
-Air Force Long-range strategic planning
-Class discussion: Two students presenting case studies will lead discussion on role of service long-range planning efforts within context of overall Executive Branch/DoD efforts.

Wednesday 18 May - Strategic Management/Implementation
-Readings: John Bryson, "A Strategic Planning Process for Public & Non-profit Organizations," Richard Hamermesh, "The Forces Shaping Strategic Decision Making," and Thomas Wheelen & J. David Hunger, "Strategy Implememtation," & "Evaluation and Control."
-Guest Lecturer: Associate Professor Nancy Roberts, Department of Administrative Sciences
-Class discussion: Implementing plans and necessary infrastructure

Monday 23 May - Student Presentations
-Navy General Board
-War Planning between WWI & WWII: the Rainbow Plans
-Class discussion: Two students presenting case studies will lead discussion on key elements found in general strategic planning and war planning of the inter-war years.

Wednesday 25 May - Student Presentations
-Seaplan 2000
-The Maritime Strategy
-Class discussion: Two students presenting case studies will lead discussion on key elements in designing a general strategic plan for the Navy in recent years

Monday 30 May - Holiday/Research Time

Wednesday 1 June - Student Presentations
-NASA
-SST
-Class discussion: Two students presenting case studies will lead discussion on key elements in success/failures of these non-DoD cases.

Monday 6 June - Student Presentations
-The B-36/USS United States controversy
-Strategic mineral stockpiling
-Class discussion: Two students presenting case studies will lead discussion on key elements in success/failure of these cases.

Wednesday 8 June - Student Presentations
-Oil stockpiling
-Marshall Plan
-Class discussion: Two students presenting case studies will lead discussion on key elements in success/failure of these cases.

Friday 10 June - Wrap Up
-Readings: Berend Bruins, "Should Naval Officers be Strategists?", Businessweek "The New Breed of Strategic Planner," Henry Mintzberg, "Crafting Strategy," & Lincoln Bloomfield, "Anticipating the Future: Foreign Policy Planning"
-Class Discussion: Should naval officers be strategists?
-Guest participant: LTG/Dr. Robert Gard USA (Ret.), President of the Monterey Institute of International Studies

NAVAL POSTGRADUATE SCHOOL
MN 4105
FALL TERM 1989

PROFESSOR NANCY ROBERTS
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T & W 3-5 AND
BY APPOINTMENT

STRATEGIC MANAGEMENT: PUBLIC AND PRIVATE

I. COURSE MATERIALS:

John Bryson. Strategic Planning for Public and Nonprofit Organizations. San Francisco: Jossey-Bass, 1988.

Philip Heymann. The Politics of Public Management. New Haven: Yale University Press, 1987.

Quinn, J.B., Mintzberg, H. James, R.M. The Strategy Process: Concepts, Contexts, and Cases. Englewood Cliffs, New Jersey: Prentice Hall, 1988.

Other materials handed out in class.

II. COURSE DESCRIPTION:

This course deals with the strategic management of the total enterprise. Strategic decisions are those that define the major areas of the firm's (or organization's) development and the allocation of resources to pursue strategic direction. This course deals with strategic management because we are concerned with both the determination of strategic direction and the management of the strategic process. Our central focus will be the problem identification, analysis, and action required by the general manager to deal with strategic issues.

Strategic management is more than analysis. To be sure, strategic analysis is a major part of this course. We will study several analytical techniques for positioning a firm or organization within a competitive environment. Strategic analyses are compounded by the trade-offs inherent in any situation. These trade-offs reflect the fact that organizations consist of many players with multiple, competing objectives. When dealing with these trade-offs, general managers must confront the judgmental issues involved in establishing organizational purpose and balancing economic and noneconomic objectives.

Strategic management requires moving beyond analysis and trade-offs into the realm of strategic action. Once the analytical problem of selecting a strategy has been dealt with, we should know what to do. Knowing what to do, however, is only part of running an organization. (Some say it's the easy part.) Knowing how to execute the selected strategy is essential to success. To the extent possible in each case, we will concern ourselves with the various combinations of systems (for example,

information, control, reward, etc.), organization structures, and people necessary to execute a given strategy. We will test our ideas about the relationships between strategy and these other elements as we proceed through the course.

Our perspective in this course is that of the general manager whose responsibility is the long-term health of the entire organization. The key tasks involved in general management include the detection of and adaptation to environmental change, the procurement and allocation of resources, the integration of activities across subparts of the organizations, and, at the most senior levels, the determination of purpose and the setting of the organization's direction.

General managers, from our perspective, are managers who are in the position to make strategic decisions for the organization. Note that such managers need to have in-depth understanding of the generic problems in all the relevant functional areas. Furthermore, they must be able to deal with problems and issues at the level of the total organization and its relationships with relevant external environments.

Successful general managers are highly competent in problem identification and analysis and have a strong action orientation. One purpose of this course is to provide an environment which will allow you to develop these skills, while at the same time gaining a conceptual understanding of the complexity of the strategic manager's task.

Functional specialists can benefit from the general management perspective even though they may not be general managers. Every function's actions should be coordinated with the overall needs of the organization. In fact, functional specialists are the people on whom general managers often rely to implement their strategies. Since such functional managers can be prone to suboptimization problems, they too, need to understand the general manager's perspective.

III. OBJECTIVES:

In this course, "knowledge" has a more pragmatic meaning. Knowledge here is the ability or wisdom to take appropriate action in a changing reality, rather than a collection of facts about a static world. The course objectives therefore include:

1. Development and reinforcement of a general management point of view -- the capacity to view an organization from an overall perspective in the context of its environment.

2. Development of an understanding of fundamental concepts in strategic management: the levels and components of strategy; value creation; competitive analysis; and organizational evolution.

3. Integration of the knowledge gained in previous core

courses and understanding of what part of that knowledge is useful to general managers.

4. Development of those skills and knowledge peculiar to general management and the general manager's job that have not been covered in previous functional courses.

5. Development of an awareness of the various impacts of external environmental forces on an organization's strategy.

6. Practice in distinguishing between basic causes of organization problems and attendant symptoms.

7. Practice in working out business strategies and implementation plans.

8. Development of habits of orderly, analytical thinking and skill in reporting conclusions effectively in both written and oral form.

9. Familiarity with some of the practical realities of running different types of organizations.

IV. ACCOMPLISHING THE OBJECTIVES: COURSE REQUIREMENTS

Like any general management situation, this course includes individual performance evaluation and feedback regarding your demonstrated ability to learn, apply, and expand on the materials that will be covered in class. These evaluations, selected to aid in reaching the course objectives, will be based on class participation and written work.

Class Participation

This course will be taught by the case method. (See note on the case method in Quinn). The case method requires that a student be present for and participate in class discussions in order to develop problem solving skills and to stimulate other forms of "learning". Therefore, I will expect you to participate actively in case discussions.

In a typical class, one or more students would be asked to start the class by answering a specific question or discussing a specific issue. Preparation of the case (including the assignment questions) should be sufficient to handle such a lead-off assignment. After a few minutes of initial analysis, we will open the discussion to the rest of the class. As a group, we will then try to build a complete analysis of the situation and address the problems and issues presented in the case. We will also spend time talking about the implementation of those recommendations and some of the complexities of effecting change in strategic management situtations.

Most general managers spend very little time reading, and even less time writing reports. The vast majority of their

interactions with others are verbal. For this reason, the development of verbal skills is given a high priority in this course. The classroom should be considered a laboratory in which you can test your ability to convince your peers of the correctness of your approach to complex problems and of your ability to achieve the desired results through the use of that approach. Some of the things that have an impact on effective class participation are the following:

1. Is the participant a good listener?

2. Are the points that are made relevant to the discussion? Are they linked to the comments of others?

3. Do the comments add to our understanding of the situation?

4. Do the comments show evidence of analysis of the case?

5. Does the participant distinguish among different kinds of data (that is, facts, opinions, beliefs, concepts, etc.)?

6. Is there a willingness to share?

7. Is there a willingness to be creative and to test new ideas, or are all comments "safe"? (For example, repetition of case facts without analysis and conclusions).

8. Is the participant willing to interact with other class members?

9. Do comments clarify and highlight the important aspects of earlier comments and lead to a clearer statement of the concepts being covered?

The questions above deal with the process of class participation. Of equal or greater concern is the content of what you say. As will be noted subsequently, class participation will be a major portion of your grade in this course.

Group Project.

Working in groups of _____, students will select one topic on which to write: The Navy Context; The JCS Context; The DoD Context; The Nasa Context; DoD and the Management of Change; Maritime Strategy; Competitive Strategy; and National Security Strategy. Your group is to prepare a written report (15 pages, double-spaced) that is to be turned in on the day of your class presentation. The report is to address the questions in the syllabus for that day.

Let us use the Navy Context as an example of what is required in the group project. Some of your report will be descriptive in

nature (e.g. identifying the current strategic management efforts in the Navy). Other parts (the majority of the report) will require critical analysis. Having a strategic management system does not necessarily imply that it functions well or functions as it was intended. To what extent can you separate out what people describe is the strategic management process from how that process actually works, or if it works at all? Critical analysis also will be required to apply what we have learned about the mature context in business to strategic management in the Navy. What can be applied and what does not transfer?

In addition to your written report, your group is to prepare a 50-minute class presentation on your topic. If you will require a reading assignment, be sure to hand it out at least one class in advance of your presentation.

V. GRADING POLICY

The purpose of grading in this course, as in all courses, is twofold. One is to evaluate your performance for purposes of the academic system. The other (and more important) is to provide you with feedback on your ability to develop, utilize, and share your ideas and conclusions concerning the topics and situations covered in the course.

Your grade in the course will be based on the following components:

Class Participation	25%
Written Group Project	25%
Group Presentation	15%
Final Examiniation	35%
	100%

Group Project Grades: Group projects will be given a grade for the entire project. In addition, each student will allocate as many as 10 or as low as 0 points to each of the group members. Based on the individual's contribution to the project, this assessment will be done independently by each member of the group and turned in to the instructor, who will average all of the scores the individual receives. As an example, if a project was awarded 15 points (perfect score), and the average score an individual received was 5, the individual would receive a 20 out of a possible 25 for the group project score. This grading system takes both group and individual performance into account.

Grades for the groups classroom presentation will be assessed in a similar way: 5 points for the presentation as whole; anywhere from 0 to 10 points allocated to each person depending on the group's assessment.

VI. OTHER ADMINISTRATIVE DETAIL

Since every faculty member tends to have somewhat different expectations as to class behavior and course norms, I'd like to outline a few of my expectations concerning such matters.

1. Because this is a case-oriented course, I consider attendance in every class extremely important. Please schedule other activities (for example field trips) at other times than MN 4105.

2. In the event that for some unavoidable reason you have to miss one class during the quarter, I would appreciate it if you would let me know that in advance of class. Also, if you do miss a class, I consider it your responsibility to find out from your classmates what materials were covered, what additional assignments were made, and what items may have been distributed in class.

3. I plan to be prepared for every class and I hope you will do the same. Since I will call on individuals whose hands are not raised, you should let me know before the start of the class if some emergency has made it impossible for you to be prepared adequately for that class.

4. I will be happy to discuss the course, your progress, or any other issues of concern to you on an individual basis. The best way to see me is during my office hours, which will be announced the first week of class. If you need to reach me at other times, please leave a message in my Administration Sciences mail box or call me at (646-2742) and I will get back to you as soon as I can.

5. I consider the Honor Code to be an extremely important part of the educational system. Group work is encouraged and appropriate for general case preparation and for the group assignment. However, any other written assignments and exams must be solely your own work.

6. Given the importance of this course, I will do everything that I can to use the class time effectively and would ask that you do the same. This will include starting, arriving, and ending on time.

II. COURSE SCHEDULE

Part I: Strategic Management

lass 1: Introduction to Course

Overview of Course and Key Terms

Case: Robin Hood pp. 145-146

Questions: At the end of the case

lass 2: Course Preparation

Reading: Quinn, Preface xi-xv

Introduction xvii-xxv

Postscript 955-961

Group Projects: Students are to sign up for and begin to work on group project.

lass 3: What is management?: Technocratic and Political

Handouts: "The Wisdom of Difference"
"Technocratic Management versus Political Management"
"Technocratic Systems at Work"
"Political Management Systems at Work"

Questions to think about as you are reading:

1. What are the basic characteristics of technocratic management?

2. To what extent did your previous work/job involve technocratic managment? Be prepared to explain.

3. What are the basic characteristics of poltical management?

4. To what extent did your previous work/job involve political management? Be prepared to explain.

lass 4: Strategic Thinking

Readings: Quinn, chapter 1, pp. 42-50, ch 16

Case: Guns of August

Questions: At the end of the case

Class 5: The Strategist

Readings: Quinn, chapter 2.

Case: MacArthur and the Phillipines pp 147-163

Questions: At the end of the case

Class 6: Strategic Analysis

Readings: Quinn, chapter 4.

Case: Federal Express pp. 750-780

Questions: At the end of the case

Class 7: Strategic Planning

Readings: Quinn, chapter 5.

Case: Comparative Planning Systems: Litton Industries and Texas Instruments pp. 251-269

Questions: At the end of the case

Class 8: Strategic Implementation: Organization Structure and Systems

Readings: Quinn, chapter 6.

Case: Polaroid pp 376-397

Questions: At the end of case

Class 9: Strategic Implementation: Culture

Readings: Quinn, chapter 8

Case: H-P pp. 875-898

Questions: What are the major aspects of H-P culture?

To what extent are "Japanese Management" principles similar to H-P principles of management?

Class 10: Strategic Implementation: Power

Readings: Quinn, ch 7

Case: British Steel (in class video)

Question: To what extent does power play a part in British Steel's strategy formulation?

Class 11: Strategic Implementation: Evaluation and Control

Readings: Quinn, Evaluation of a Business Strategy, pp. 50-57

Handouts: Wheelan and Hunger, "Evaluation and Control"

Ratios

Case: H-P pp. 875-898

Questions: At the end of the case

How would you evaluate H-P's current strategy?

Part II: Strategic Management in Profit and Public Organizations: A Comparison

Class 12: Strategic Management in Profit and Public Organizations: The Similarities

Readings: Bryson, pp. xi-xv, 1-4, 11-21, 22-45, 46-70, 199-215, 216-230

Question: What are the similarities between public and profit organizations in terms of strategic management?

Class 13: Strategic Management in Governement Agencies, Departments, the Executive Branch: The Differences

Readings: Preface and pp. 3-105 in Politics of Public Management, by Heymann

Questions: What accounts for the distinctiveness of management in the public sector?

To what extent do these distinctive aspects of public management make the application of strategic management difficult? impossible?

Class 14: Strategic Management of Government Agencies, Departments, the Executive Branch: The Differences

Readings: pp 109-189 in Politics of Public Management by Heymann

Questions: What accounts for the distinctiveness of of management in the public sector?

To what extent do these distinctive aspects of public management make the application of strategic management difficult? impossible?

Part III: The Context and Achieving Configuration

Class 15: The Innovation Context: NASA

First Part of Class:

Readings: Quinn, pp. 516-530, pp. 606-637

1. What are the characteristics of the innovation context?

2. How is H-P an example of business in an innovation context?

Second Part of Class: Report on Strategic Management in NASA

Readings: To Be Assigned

1. To what extent is strategic management practiced in NASA? Who is involved? What is done? When? Where? Process?

2. What, if anything, can we learn from businesses in an innovation context that can be applied to Strategic Management in NASA?

Class 16: The Mature Context:

First Part of Class:

Readings: Quinn, pp. 546-558.

1. What are the characteristics of the mature context?

2. How is Exon (pp. 457- 465) an example of business in a mature context?

Second Part of Class: Report on Strategic Management in the Navy

Readings: To Be Assigned

1. To what extent is strategic management practiced in the Navy? Who is involved? What is done? When? Where? Process?

2. What, if anything, can we learn from businesses in a mature context that can be applied to Strategic Management in the Navy?

lass 17: The Diversified Context: DoD

First Part of Class:

Readings: Quinn, pp. 577-605

1. What are the characteristics of the diversified context?

2. How is GM (pp. 480-491) an example of business in a diversified context?

Second Part of Class: Report on Strategic Management in DoD

Readings: To Be Assigned

1. To what extent is strategic management practiced in DoD? Who is involved? What is done? When? Where? Process?

2. What, if anything, can we learn from businesses in a diversified context that can be applied to Strategic Management in DoD?

lass 18: The Professional Context: JCS

First Part of Class:

Readings: Quinn, pp. 638-660

1. What are the characteristics of the professional context?

2. How is Davidson Hospital (pp. 864- 869) an example of a professional context?

Second Part of Class: Report on Strategic Management in JCS

Readings: To Be Assigned

1. To what extent is strategic management practiced in the JCS? Who is involved? What is done? Where? When? Process?

2. What, if anything, can we learn from businesses in a professional context that can be applied to Strategic Management in JCS?

Class 19: Managing Transitions

Readings: Quinn, pp. 661-704

Case: DoD and The Management of Change

Questions: According to the Staff Report to the Senate Armed Services Committee, what changes are needed in DoD?

What is your evaluation of these changes?

Do you have alternative recommendations to propose?

Class 20: 1. Report on Maritime Strategy

Readings: To Be Announced

Questions: What is the Maritime Strategy?

How was this strategy devised? Who was involved? To what extent did strategic thinking and analysis and planning go into the development of the maritime strategy?

To what extent has this strategy been implemented and evaluated? With what degree of success/failure?

What are the strengths and weaknesses of this strategy?

2. Report on Competitive Strategies

Readings: To Be Announced

Questions: What are Competitive Strategies?

How were these strategies devised? Who was involved? To what extent did strategic thinking and analysis and planning go into the development of competitive strategies?

To what extent has this strategy been implemented and evaluated? With what degree of success/failure?

What are the strengths and weaknesses of this strategy?

Class 21: 1. National Security Strategy

Readings: To Be Announced

Questions: What is the National Security Strategy(ies)?

How was this strategy devised? Who was involved? To what extent did strategic thinking and analysis and planning go into the development of the National Security Strategy?

To what extent has this strategy been implemented and evaluated? With what degree of success/failure?

What are the strengths and weaknesses of this strategy?

2. Alternatives for the Future

Handouts: "The United States Isn't a Company, It's not Even Japan," pp. 169-186 in Bower

"Small May Be Beautiful, but Local Works," pp. 187-220 in Bower

"Who Leads," pp. 221-237 in Bower

Question: To what extent can the mechanisms Bower introduces be applied to DoD?

Class 22: Final Exam

VIII. JOURNALS AND REFERENCES IN STRATEGIC MANAGEMENT

Journals

* Academy of Management Review
* Business Week
* Fortune
* Harvard Business Review
* Journal of Business Strategy
* Journal of Contemporary Business
* Journal of General Management
* Journal of Policy Analysis and Management
* Long Range Planning Journal
* Managerial Planning

  Planning Review
* Policy Sciences

  Policy Studies Journal
* Public Administration Review
* Strategic Management Journal
* Wall Street Journal
* available in NPS Dudley Knox Library

General References

Ackoff, R.L. The Concept of Corporate Planning. New York: John Wiley & Sons, 1970.

Allison, G.T. Essence of Decision. Boston: Little, Brown & Co., 1971.

Andrews, K.R. The Concept of Corporate Strategy. Homewood, IL: Dow Jones-Irwin, 1980.

Ansoff, H.I. Business Strategy. New York: Penguin Books, 1969.

----------. Corporate Strategy: An Analytic Approach to Business Policy for Growth and Expansion. New York: McGraw-Hill Book Company, 1965.

----------, Declerk, R.P., & Hayes, R.L. From Strategic Planning to Strategic Management. New York: John Wiley & Sons, 1976.

Barnard, C. I. The Functions of the Executive. Cambridge, MA: Harvard University Press, 1938.

Chandler, A.D. Strategy and Structure. New York: Doubleday, 1966.

Cyert, R.M. & March, J.G. A Behavioral Theory of the Firm. Englewood Cliffs, NJ: Prentice-Hall, 1963.

Galbraith, J.R. & Nathanson, D.A. Strategy Implementation: The World of Structure and Process. New York: West Publishing Co., 1978.

Gardner, J.R., Rachlin, R. & Sweeny, H.W.A. (eds.) Handbook of Strategic Planning. New York: John Wiley & Sons, 1986.

Hamermesh, R.G. Making Strategy Work: How Senior Managers Produce Results. New York: John Wiley & Sons, 1986.

Hamermesh, R.G. (ed.). Strategic Management. New York: John Wiley & Sons, 1983.

Hofer, C.W. & Schendel. Strategy Fromulation--Analytical Concepts. St. Paul, MN: West Publishing Co., 1976.

Lindblom, C.E. Policy Making Process. Englewood Cliffs, NJ: Prentice-Hall, 1968.

Lorange, P. & Vancil, R.E. Strategic Planning Systems. Englewood Cliffs, NJ: Prentice-Hall, 1977.

MacMillian, I. Strategy Formulation. St. Paul, MN: West Publishing Co., 1976.

Naylor, T.H. Corporate Planning Models. Reading, MA: Addison-Wesley, 1979.

Paine, R. & Naumes, W.E. Strategy and Policy Formation: An Integrative Approach. Philadelphia: W.B. Saunders Co., 1974.

Porter, M. Competitive Advantage. New York: Free Press, 1985.

Porter, M. Competitive Strategy. New York: Free Press, 1981.

Quinn, J.B. Strategic Change: Logical Incrementalism. Homewood, IL: Irwin, 1980.

Schendel, D.E. Y Hoffer, C.W. (eds.). Strategic Management: A New View of Business Policy and Planning. Boston: Little,

Brown, & Co., 1979.

Steiner, G.A. Top Management Planning. New York: Macmillan Company, 1969.

----------, & Miner, J.D. Management Policy and Strategy. New York: Macmillan Co., 1977.

Thompson, A.A. Jr., & Strickland, A.J., III, Strategy Formulation and Implementation. Dallas, TX: Business Publications, Inc., 1980.

Vickers, G. The Art of Judgment: A Study of Policy Making. New York: Basic Books, 1965.

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